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

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

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14 Held in
15 Resources Building
16 Sacramento, California
17 Friday, January 14, 1994

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19 VOLUME XXXII

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23 Reported by: Kelsey Davenport Anglin, RPR,
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01 SACRAMENTO, CALIFORNIA

02 FRIDAY, JANUARY 14, 1993, 8:30 A.M.

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04 HEARING OFFICER DEL PIERO: Mr. Birmingham? Good

05 morning, Mr. Birmingham.

06 MR. BIRMINGHAM: Good morning.

07 HEARING OFFICER DEL PIERO: Good morning, Ladies

08 and Gentlemen.

09 MR. BIRMINGHAM: I was wiping the sleep out of my

10 eyes.

11 HEARING OFFICER DEL PIERO: I know. You've got

12 new hobbies.

13 MR. BIRMINGHAM: That, too.

14 HEARING OFFICER DEL PIERO: Ladies and Gentlemen,

15 this is the continuation of the ongoing hearing by the

16 State Water Resources Control Board regarding the

17 amendment of the City of Los Angeles' water rights

18 licenses on tributaries to Mono Lake.

19 My name is Marc Del Piero. I'm Vice-Chairman of

20 the State Water Resources Control Board, and I'm acting

21 in the capacity as Hearing Officer for the proceedings.

22 Today is -- what is the date today, Mr. Canaday?

23 January --

24 MR. BIRMINGHAM: 14th.

25 HEARING OFFICER DEL PIERO: -- 14th today. A day

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01 of changes outside of this hearing room. The

02 Sacramento Union's last day of publication, and the

03 morning after the first time the Sacramento Kings have

04 won in a very long time. Actually beat the Hornets, I
05 understand.

06 MR. CANADAY: Yes, they did. Convincingly.

07 HEARING OFFICER DEL PIERO: I heard the crowd
08 enjoyed it immensely. Is that true?

09 MR. CANADAY: True.

10 HEARING OFFICER DEL PIERO: Were you one of those?

11 MR. CANADAY: Yes, Sir.

12 HEARING OFFICER DEL PIERO: Good morning,
13 Mr. Birmingham. How are you, Sir?

14 MR. BIRMINGHAM: I'm fine, thank you,
15 Mr. Del Piero.

16 HEARING OFFICER DEL PIERO: Are you ready to go?

17 MR. BIRMINGHAM: Well, we are ready to go, but
18 there are a couple of matters that I wanted to discuss
19 before we start with testimony this morning.

20 Yesterday, Ms. Scoonover moved for the
21 introduction of SLC and DPR 5, Mono Lake viewpoint by
22 Ranger David Carle. The book is a series of essays
23 that were written by Ranger Carle and many of the
24 essays contain opinions that Ranger Carle is not
25 qualified to express. However, the Hearing Officer has
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01 previously indicated, correctly, that there are many
02 opinions in the record that the individuals stating
03 those opinions probably were unqualified to state, and
04 Ranger Carle's qualifications are in the record. So we
05 would have no objection to the introduction of this
06 exhibit.

07 HEARING OFFICER DEL PIERO: Thank you very much,
08 Mr. Birmingham, and I will then, unless hearing any
09 other comments in regard to that matter, order that
10 entered into the record.

11 The number, Mr. Smith?

12 MR. SMITH: It's SLC and DPR No. 5.

13 HEARING OFFICER DEL PIERO: No. 5.

14 MR. DODGE: We don't object to its admissibility,
15 either, although I must say that I suspect there are a
16 lot of inadmissible materials in it, but we don't
17 object.

18 HEARING OFFICER DEL PIERO: Thank you. Thank you
19 very much.

20 (SLC/DPR Exhibit No. 5 was
21 admitted into evidence.)

22 MR. BIRMINGHAM: A second matter. We had
23 indicated yesterday that George Barnes would be
24 available to testify today. We are informed that
25 Mr. Barnes is available, but Dave Anderson, who is a
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01 Deputy Staff Counsel, a member of the staff counsel at
02 DWR who is responsible for the Bay-Delta proceedings,
03 or at least the department's participation in the
04 Bay-Delta proceedings, has indicated that he might not
05 be available today, and he wants to be here when
06 Mr. Barnes testifies. Mr. Barnes was subpoenaed to
07 appear and Mr. --

08 MS. CAHILL: I'm sorry. I had trouble yesterday,
09 for some reason, hearing.

10 HEARING OFFICER DEL PIERO: Maybe they aren't
11 pulled down.

12 MR. BIRMINGHAM: I will state it again. Dave
13 Anderson, who is the attorney for DWR responsible for
14 the Bay-Delta proceedings and the attorney who's
15 principally involved with Mr. Barnes' work, is not
16 available or has indicated he may not be available
17 today. We have arranged to talk to him at nine
18 o'clock, and --

19 HEARING OFFICER DEL PIERO: You want to break at
20 nine?

21 MR. BIRMINGHAM: No. We do not want to break at
22 nine. We'll just go out and make a telephone call, but
23 we'll have a better idea about Mr. Barnes'
24 availability. I think, in any event, with the
25 witnesses we have, we will fill up the day whether
0010 Mr. Barnes is available or not.

01 HEARING OFFICER DEL PIERO: Fine.

02 MR. BIRMINGHAM: A third, final matter is that
03 yesterday during Dr. Hardy's testimony, he indicated
04 the tables that were attached to his testimony
05 contained a column that had been moved from the
06 right-hand side of the page to the left-hand side of
07 the page. We have corrected tables here this morning
08 for the Board and for any parties who are interested.
09 Thank you.

10 HEARING OFFICER DEL PIERO: Thank you very much.
11 If you could see to it, Mr. Birmingham, that those are
12 distributed, I'd appreciate it.

13 MR. BIRMINGHAM: And, actually -- I'm sorry. One
14 fourth item. Mr. Tillemans is here today, but the work
15 that he did was primarily in support of Dr. Beschta's
16 testimony, so we wondered if it would be possible to
17 have him come back and be cross-examined at the time
18 that Dr. Beschta's here on the 24th.

19 MR. DODGE: I have some questions today for
20 Mr. Tillemans.

21 HEARING OFFICER DEL PIERO: In relationship to
22 those issues?

23 MR. DODGE: In relationship to the work he did.
24 Nothing --

25

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01 HEARING OFFICER DEL PIERO: Mr. Birmingham, do you
02 have a problem with that at this point?

03 MR. BIRMINGHAM: The work that Mr. Tillemans did
04 was --

05 HEARING OFFICER DEL PIERO: He did the field
06 survey work.

07 MR. BIRMINGHAM: He did the field survey work
08 under the direction of Dr. Beschta. To the extent
09 there are questions about that work, I think it would
10 be more appropriate if both Dr. Beschta and
11 Mr. Tillemans were examined at the same time because
12 Mr. Tillemans did that work at the direction of
13 Dr. Beschta and took direction from Dr. Beschta.

14 HEARING OFFICER DEL PIERO: Is there a particular
15 reason why you prefer to do that examination today as
16 opposed to later when Dr. Beschta is here?

17 MR. DODGE: It relates simply to the work that he
18 did, and I'd like to get the answers today. For
19 example, he's got a depth survey. Depending on the

20 answers, we may do a depth survey. I don't know.
21 HEARING OFFICER DEL PIERO: How long do you
22 anticipate -- how many questions do you anticipate
23 having of him?
24 MR. DODGE: Five minutes.
25 MR. BIRMINGHAM: Well, Mr. Tillemans --

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01 HEARING OFFICER DEL PIERO: I think we'll -- if it
02 goes beyond the scope of the work Mr. Tillemans does,
03 I'll ask that Mr. Dodge refrain from asking those
04 questions. If it relates to the work Mr. Tillemans
05 did, I think I'm going to allow him to ask those
06 examination questions.

07 MR. BIRMINGHAM: Thank you.

08 HEARING OFFICER DEL PIERO: Ms. Cahill? Good
09 morning.

10 MS. CAHILL: Good morning. I had understood that
11 this morning we were going to be questioning Dr. Orton
12 and Dr. Platts. I did not understand that
13 Mr. Hasencamp was going to be questioned today. It was
14 my understanding that he was next week sometime, and
15 I'm not prepared to do that.

16 MR. BIRMINGHAM: Mr. Hasencamp is here, and he
17 will be available at any time whenever Ms. Cahill is
18 ready.

19 HEARING OFFICER DEL PIERO: As I recall,
20 Mr. Birmingham, you did indicate that Mr. Hasencamp was
21 going to be on -- was it not next week or the 24th?

22 MR. BIRMINGHAM: He's going to be on with the
23 panel that talks about LAAMP and LAASM, which will be
24 next week. He will also be available on the 24th when
25 Dr. Beschta is here --

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01 HEARING OFFICER DEL PIERO: Fine. Then we don't
02 have a problem

03 MS. CAHILL: I just didn't want to waive any
04 rights to examine him because I have not prepared that.

05 HEARING OFFICER DEL PIERO: That's fine.

06 MS. CAHILL: Let me start with --

07 MR. BIRMINGHAM: Excuse me. I am misinformed.
08 Mr. Hasencamp tells me that he is sitting at the table
09 today only in the event a question comes up where he
10 assists other members of the panel, but he does not
11 expect to be cross-examined generally today.

12 HEARING OFFICER DEL PIERO: That's good because
13 that was my understanding, also. I understood he was
14 going to be on later.

15 MS. CAHILL: Thank you.

16 CROSS-EXAMINATION BY MS. CAHILL

17 Q Good morning, Dr. Orton.

18 A BY DR. ORTON: Good morning.

19 Q Dr. Orton, are you a geomorphologist?

20 A I have training in that subject.

21 Q Do you have a degree in it?

22 A I do not.

23 Q And are you a hydrologist?

24 A Same answer, I have training. I do not have a
25 degree.

0014

01 Q Have you ever developed and presented

02 flushing-flow recommendations in any other proceeding?
03 A I have not.
04 Q Have you ever developed flushing-flow
05 recommendations on any other stream?
06 A Can you -- recommendations that were implemented
07 or --
08 Q Well, start -- if you even made them. Have you
09 developed flushing-flow recommendations and recommended
10 them to anyone?
11 A Yes. Within the department -- within the
12 department, yes.
13 Q And then were those actually, then, presented to
14 any state or local agency?
15 A Not to my knowledge.
16 Q Have you taken the Fish and Wildlife Service's
17 IFIM decision-making training? I understand they have
18 a particular course that relates to decision making.
19 A Is that IF 200?
20 Q No.
21 A Then I have not. I may have taken a similar
22 course, which is IF 200.
23 Q With regard to your testimony on the first page --
24 I'm sorry, on Page 2, you indicate that your role in
25 the development of the L.A. DWP management plan
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01 flushing flows was to advise L.A. DWP of the relevant
02 biological information for each of the elements that
03 you listed, which were frequency, magnitude, duration,
04 and timing. You provided, then, biological
05 information; is that right?
06 A Biological. I also provided hydrologic
07 information and geologic or geomorphic information that
08 had a biological component to it.
09 Q And what was the source of the hydrological
10 information?
11 A Well, a variety of sources; primarily, L.A. DWP
12 hydro records. My analyses of those records. Aerial
13 photographs from 1940, 1929 of the Mono Basin. The
14 existing record, for example, statements by Mr. Vestal
15 from 1940.
16 Q What was the source of the geological information?
17 A Aerial photographs. My own observations of the
18 streams. The results of the population studies that
19 were conducted by the city, and others.
20 Q That's geological information?
21 A I mentioned earlier that some of this information
22 has a biological component, and you can infer some
23 geomorphic information from fish population data.
24 Q Did you take into account the Beak report?
25 A I did.
0016
01 Q And did you take into account the Trihey work?
02 A Could you be more specific? The answer is I did.
03 Q What is the magnitude of the flushing flow in the
04 L.A. DWP management plan?
05 A I'd have to have those numbers in front of me.
06 Q Can you get them?
07 A BY MR. HASENCAMP: Yeah. They were 150 cfs.
08 Q Is it true, Dr. Orton, that you recommended the
09 specific flushing-flow numbers to L.A. DWP?

10 A BY DR. ORTON: That's a difficult question. Maybe
11 I'll -- the numbers that you find --

12 Q It shouldn't be.

13 A Well, the numbers that you find on the L.A. DWP
14 management plan, some of those numbers match with
15 recommendations that I made and some do not.

16 Q Well, then, I think we do need to explore this.
17 What numbers did you recommend? Do you have with you
18 or elsewhere the numbers that you provided to L.A. DWP?

19 A I think I know those, yes.

20 Q And what are they?

21 A Well, there's a variety of numbers. One of the
22 problems that we dealt with is that there's not a
23 single number in any of these cases. For example, on
24 Rush Creek, the flushing flows capable of mobilizing
25 fines depends on what fines you wish to mobilize. I

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01 advised DWP -- I identified a number for them, if you
02 would, of approximately 95 cfs, was my best estimate of
03 flows that would mobilize fines in relatively
04 uncompacted gravels.

05 On the other hand, the majority of gravels in Rush
06 Creek are firmly compacted, and I advised them that,
07 based on hydrologic information I reviewed, that flows
08 on the order of 268 to 358, I believe, were capable of
09 mobilizing those flows.

10 Q Okay. So, then, to translate that --

11 A Or those fines.

12 Q If the Board were to translate your recommendation
13 into a flushing-flow requirement, what is your
14 recommendation for flushing flows? What amount and how
15 often? What recommendations did you give to L.A. DWP
16 to put into their management plan? Actually, I changed
17 the question. Let me rephrase it and ask the second
18 one.

19 What specific numbers in what months and how
20 frequently did you give to L.A. DWP to put into the
21 management plan?

22 A Okay. Well, element by element, I guess --
23 overall I -- first off, what I told them was that in
24 Rush Creek, flushing flows may not be necessary.

25 Q At all?

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01 A Not at all. I told them that it may not be
02 necessary for the period of record that I had
03 reviewed. For example, in Rush Creek from 1986, when
04 the last high-flow event came through, it was a very
05 large high-flow event, until recently, fish populations
06 have done very well. For a large portion of that time,
07 up to about 1989, flows have been very constant, about
08 19 cfs. The fish populations show no indication of
09 being adversely affected by those relatively constant
10 flows.

11 Q Dr. Orton, I don't believe you're answering my
12 question. The L.A. DWP management plan is a model.
13 And the model has to input certain flushing flows.
14 Now, those -- Mr. Hasencamp told me that he got the
15 flushing-flow numbers from you, and you're now telling
16 me that not all your recommendations were taken.

17 But first of all, I need to know what your

18 recommendations were. What numbers did you input into
19 your model for flushing flows?
20 MR. BIRMINGHAM: Objection.
21 MR. HASENCAMP: If I could --
22 HEARING OFFICER DEL PIERO: The nature of the
23 objection?
24 MR. BIRMINGHAM: The nature of the objection is
25 that the question is compound, and it assumes facts not
0019 in evidence.
01 HEARING OFFICER DEL PIERO: The assumption?
02 MR. BIRMINGHAM: The assumption -- she just
03 referred to "your model." I don't believe that there's
04 any evidence that Dr. Orton has a model which he used.
05 He said he reviewed different data, but there's no
06 testimony regarding a model.
07 MS. CAHILL: I will clarify that --
08 HEARING OFFICER DEL PIERO: Excuse me. I'm going
09 to sustain your objection. This is the second time,
10 however, that Ms. Cahill has asked this question. Even
11 though I'm sustaining your objection, I'm going to ask
12 the Court Reporter to go back to the original question
13 that she asked because the original question that she
14 asked was neither compound nor was it ambiguous nor did
15 it assume facts not in evidence, and it was not
16 answered. And she attempted to restate because she
17 didn't get an answer the first time.
18 So in order to move this along within the time
19 lines that I have given everybody, I'm going to ask the
20 Reporter to read that first question back.
21 MR. BIRMINGHAM: And then may we have an
22 instruction to Dr. Orton just to answer the question as
23 read back, Mr. Del Piero?
24 HEARING OFFICER DEL PIERO: Certainly.
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01 MR. BIRMINGHAM: Thank you.
02 (Whereupon the record was read by the Reporter.)
03 Q BY MS. CAHILL: Why don't we start with what are
04 they? What were the numbers that you provided to L.A.
05 DWP?
06 A BY MR. HASENCAMP: Dr. Orton and I sat down, and he
07 gave me the analysis. It was not a situation where he
08 gave me these concrete numbers to use, but it was a
09 discussion. He said, "These were the things to
10 accomplish and these are the ranges of values and
11 numbers that would accomplish that." So when we
12 incorporated flushing flows in our management plan, it
13 was a management decision based on the expert opinion
14 of Dr. Orton and his association with Dr. Beschta.
15 Q Mr. Hasencamp, are you saying, then, that you made
16 the management decision? Who made the management
17 decision?
18 A I did.
19 Q And what concrete numbers did you have from
20 Dr. Orton to arrive at that decision?
21 A We had many discussions. This is several months
22 ago. And he said a minimum range, a minimum flow, a
23 minimum flush of around 95, as he had said earlier,
24 accomplishes one thing and another flow accomplishes
25 another thing, and I said, "Well, let's look at the

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01 hydrology. Let's look at the water available," and
02 then we came to a consensus of would these flows meet
03 the criteria that are sufficient, in his opinion? He
04 said that they were.

05 Q Okay. Now, Dr. Orton, you said earlier, I
06 believe, that not all of your recommendations were
07 taken. Is that right?

08 A BY DR. ORTON: Correct. I need to clarify --

09 MR. BIRMINGHAM: Excuse me. I'm still not sure we
10 have an answer to the question what were the numbers
11 and I don't know if Ms. Cahill's still interested in
12 having that information, but that was the question that
13 was asked.

14 MS. CAHILL: Let's start --

15 HEARING OFFICER DEL PIERO: I think she started
16 again.

17 Q BY MS. CAHILL: Let's start with Dr. Orton.

18 In addition to just generally discussing with
19 Mr. Hasencamp, did you give him specific flow numbers
20 with specific frequencies?

21 A BY DR. ORTON: I did.

22 Q And what are those flows and frequencies?

23 A Okay. I need to clarify something, and what I
24 need to clarify is are you asking me for every number I
25 gave him in the course of our conversations, or are you

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01 asking him the numbers that are in the L.A. DWP
02 management plan?

03 Q Well, I'm trying to get at both, I think. I can't
04 explore the reasonableness of your numbers unless I
05 know what they are.

06 A Okay.

07 HEARING OFFICER DEL PIERO: Ms. Cahill, you still
08 haven't gotten an answer to the last question.

09 Dr. Orton, do you recall what the last question
10 was?

11 DR. ORTON: Yes, I do.

12 HEARING OFFICER DEL PIERO: You want to try and
13 answer it?

14 DR. ORTON: Yes, I would.

15 HEARING OFFICER DEL PIERO: Fine.

16 DR. ORTON: In conversations with Mr. Hasencamp --
17 and I'll go through this element by element --
18 frequency of the flows, for example, I told him that if
19 he wanted to mobilize the concrete compacted and
20 cemented gravels in Rush Creek, the frequency of flows
21 would be on the order of once per decade. I told him
22 that those flows may not come around once per decade.
23 They might be flows that are 5- to 25-year events
24 based on the 19 -- this was based on the 1986 event.

25 I told him with respect to the duration of that

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01 flow, I told him that historically the duration of the
02 1986 event was months. I also told him that it was
03 months because they used the Grant Reservoir to
04 supplement what was coming down, and that hydrograph --
05 you could not get that hydrograph until you had a
06 comparable year.

07 Q BY MS. CAHILL: So you didn't recommend --

08 MR. BIRMINGHAM: Excuse me. Ms. Cahill asked a
09 question about numbers. Dr. Orton is trying to answer
10 a question about numbers. He has yet to get to the
11 numbers, and if she wants that information, then I
12 think she should let him finish the answer. I still
13 haven't heard the numbers, and I think Dr. Orton ought
14 to be given a chance to answer the question.

15 HEARING OFFICER DEL PIERO: Dr. Orton, I thought
16 you had completed the answer.

17 DR. ORTON: For that element, yes.

18 HEARING OFFICER DEL PIERO: Do you have more?

19 DR. ORTON: Well, yes, there's other elements.

20 HEARING OFFICER DEL PIERO: Please proceed, then,
21 Sir.

22 DR. ORTON: Maybe I mentioned this, but that
23 event, that flow event in 1986, ranged from about 258
24 cfs on up to about 354 cfs. I gave Mr. Hasencamp that
25 range of numbers. I told him that all I knew was that
0024

01 those flows probably mobilized the compacted gravels in
02 Rush Creek.

03 Q BY MS. CAHILL: Actually, let's take this in pieces.
04 Mr. Hasencamp, did you input into the model some
05 flushing-flow requirement based on that information
06 from Dr. Orton?

07 A BY MR. HASENCAMP: I inputted into the model all of
08 his recommendations. I didn't take one aspect,
09 piecemeal, and try 50 different runs. I said, "What is
10 it that we want to accomplish by these flushing and
11 channel-maintenance flows," discussed it with him and
12 came up with the 150 cfs.

13 Q But not a specific particular month, particular
14 frequency?

15 A Yes, a frequency of every other year.

16 Q Every other year for which of those two flows that
17 he just described?

18 A BY DR. ORTON: I need to -- may I intervene here?
19 Those two flows, again, had the specific purpose
20 of mobilizing compacted gravels in Rush Creek. I also
21 discussed with him flows that would be, in my opinion,
22 capable of mobilizing uncompacted gravels in Rush
23 Creek.

24 I told him that -- all I told him was those were
25 the flows that would probably mobilize those gravels,
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01 and there was another discussion on whether you needed
02 to mobilize those gravels from a biological
03 perspective.

04 Q Okay. So the actual determination of which
05 numbers to input into the model was made by you,
06 Mr. Hasencamp; is that correct?

07 A BY MR. HASENCAMP: Yes, it was.

08 Q You are not a hydrologist?

09 A Yes, I am.

10 Q Yes, you are. You are a hydrologist but -- that
11 was the wrong question. You are not a geomorphologist.

12 HEARING OFFICER DEL PIERO: The wrong question,
13 but the right answer.

14 (Laughter.)

15 MS. CAHILL: Indeed.

16 MR. HASENCAMP: I'm not a geomorphologist, but I
17 relied, again, on experts. I didn't just come up with
18 some numbers that would work in our plan, but I
19 consulted with Dr. Orton. And these numbers, these
20 flushing flows, we ran it by other experts on the
21 panel.

22 Q BY MS. CAHILL: And were you using impaired or
23 natural hydrologic flow records in determining the
24 flushing flows?

25 A BY MR. HASENCAMP: I used all the records, impaired,
0026 unimpaired, actual, natural. We have several different
01 flow records for each creek.

02 Q There really is no way that we can track your
03 decision-making process, is there?

04 MR. BIRMINGHAM: Objection, argumentative.

05 Q BY MS. CAHILL: Is there any way?

06 HEARING OFFICER DEL PIERO: Why don't you restate
07 the question? I'm going to sustain the objection, but
08 I'm interested in the answer, so --

09 Q BY MS. CAHILL: Is there any way we could track your
10 decision-making process, which hydrologic information
11 you took into account and how it resulted in the flows
12 that you input into the management plan?

13 A BY MR. HASENCAMP: Well, I didn't write down all of
14 my thoughts throughout the process, but generally, I
15 consulted with the biologists. I looked at the
16 hydrologic records. I looked at other recommendations
17 in the past. I took all that into account and came up
18 with a flushing-flow regime, went back to the
19 biologist, checked the hydrologic records again, got
20 approval from the different experts, and then went
21 ahead and put them into management.

22 Q One last question, I think, for you, Dr. Orton.
23 Your testimony says, with regard to the duration of
24 flushing flows, that you had, quote, no input on this

0027 element, unquote; is that correct?

01 A BY DR. ORTON: Not completely. I think the statement
02 goes on -- yeah, it continues, I had no input on
03 settlement except to note that long periods of high
04 flows would have biological consequences. In this
05 case, long periods of high flows would probably result
06 in a net loss of uncompacted gravels in both creeks.
07 So when I saw their duration -- when I saw their
08 duration figures, I was asked to comment on all the
09 figures, and --

10 Q And what do you consider to be a long period of
11 flow?

12 A Well, for example, in Rush Creek, after the flows
13 in 19 -- I'll answer the question, then I'll explain.
14 A long period of flow would be on the order of anywhere
15 from three weeks to months. Months being, say, six to
16 nine months. Both of those numbers, three weeks and
17 six to nine months relate to information that I had in
18 my possession.

19 The six to nine months for Rush Creek relates to
20 the period of time the flows were increased in 1990
21 from 19 cfs on up to a range of -- up to 100. In fact,
22 this is the record I relied on in 1990, flows of 100
23

24 for several months. Those flows apparently removed a
25 lot of uncompacted gravels in the creeks.

0028

01 On Lee Vining Creek, flows in 1989 were brought up
02 from 5 cfs to about 32 by the end of the year, and then
03 the following year, they're raised further to peak at
04 about 52. I informed them that those flows also
05 appeared to have adverse effects on the population.
06 So, again, I was giving them brackets of time.

07 Q Okay. With regard to short-term flushing flows,
08 you did not make any recommendations. You had no input
09 on the element of flushing flows with regard to
10 duration for shorter periods of time. There are --

11 A I don't recall -- I don't think so. I don't
12 remember.

13 Q Okay.

14 A I told Mr. Hasencamp that he should speak with
15 Dr. Beschta and others, because the concept here is
16 that you can have a short duration flushing flow and
17 accomplish the same things as a longer period of time.
18 What part of the hydrograph, what slice of that you
19 wish to take is, I think, more in the expertise of
20 Dr. Beschta, Dr. Platts. And that's how I advised him.

21 Q Mr. Hasencamp, I believe you told me that you had
22 gotten input from Dr. Orton on the flushing flows that
23 went into the management plan. I believe you told me
24 that the amount of water might provide a particular
25 flushing flow for a ten-day period. That ten days

0029

01 would not have come from

02 Dr. Orton; is that right?

03 A BY MR. HASENCAMP: He did not give me a figure of ten
04 days, but after the number was derived, I went back and
05 checked with him again. He, then, did approve, from
06 his knowledge, that ten days was sufficient.

07 Q Let me turn over to Dr. Platts and the Upper Owens
08 River. Dr. Platts, I am assuming that you had reviewed
09 the EBASCO report on the Upper Owens River; is that
10 right?

11 A BY DR. PLATTS: That's right.

12 Q The Upper Owens River is primarily a spring-fed
13 river; is it not?

14 A Would you define "primarily"? Do you want me to
15 answer just based on what I think?

16 Q Yes. Or define --

17 MR. BIRMINGHAM: Excuse me. If Dr. Platts doesn't
18 understand what Ms. Cahill means by "primarily," I
19 would object on the grounds it's ambiguous. If he
20 understands what she means, I would withdraw my
21 objection.

22 HEARING OFFICER DEL PIERO: Do you understand,
23 Dr. Platts?

24 DR. PLATTS: I think I understand what she means.

25 HEARING OFFICER DEL PIERO: Do you understand?

0030

01 DR. PLATTS: No, not completely, no.

02 HEARING OFFICER DEL PIERO: I'm going to sustain
03 the objection.

04 Ms. Cahill, will you be a little more specific?

05 Q BY MS. CAHILL: Dr. Platts, would you characterize

06 the Upper Owens River as a spring-fed stream or a
07 snow-melt stream?
08 A BY DR. PLATTS: Neither.
09 Q And it has some characteristics of each?
10 A Yes, it does.
11 Q And of those characteristics, are the spring-fed
12 characteristics greater than the snow-melt
13 characteristics?
14 A No. You would need to define "characteristics."
15 Q Okay. Let me refer you to Figure 5 in DFG Exhibit
16 62. This shows average monthly flows. Do you have
17 that report? Thank you. It's on Page 17.
18 A Is this 931?
19 Q Yes.
20 A On page?
21 Q Page 17, Figure 5. And the lighter-colored bars
22 are the average monthly flows from 1941 to 1989 just
23 upstream of East Portal. Is that correct?
24 A That's correct.
25 Q And isn't it true that the peak flows shown here

0031

01 are much closer to the base flows than they are on a
02 stream like Rush or Lee Vining that's primarily a
03 snow-melt stream?
04 A That would be correct, except the monthly flows
05 mask out what is really going on.
06 Q But on a monthly basis, the difference between the
07 runoff months and the base months is much less on the
08 Upper Owens River than it is on either Rush or Lee
09 Vining Creek; isn't that right?
10 A I have not looked at Rush or Lee Vining Creek, but
11 I would assume that you're right.
12 Q Now, if you were to add an increment of flow on
13 top of each of those natural monthly flows, you would
14 have, in effect, the same shape of the curve; would you
15 not?
16 A That's correct. On a monthly basis.
17 Q So when you testified with regard to the
18 undesirability of having uniform flows in the Upper
19 Owens River -- let me withdraw that.
20 Isn't it true that the Upper Owens River has, on a
21 monthly average, roughly uniform flows just naturally?
22 MR. BIRMINGHAM: Excuse me. May I ask that that
23 be reread?
24 (Whereupon the record was read by the Reporter.)
25 DR. PLATTS: I would say they're not uniform.

0032

01 Q BY MS. CAHILL: But the variability is no more, on a
02 monthly basis, than 50 percent of the base flow?
03 A BY DR. PLATTS: Yes. But you want to remember that
04 monthly flows mask out what's really going on in the
05 system.
06 Q Okay. But if you were to take a uniform increment
07 of water and add it to the natural monthly flows, you
08 would, in fact, mimic the natural pattern, would you
09 not?
10 A No, you wouldn't.
11 Q And why not?
12 A Because you'd be masking out the peak flows,
13 instantaneous peak flows that are coming down the

14 system.

15 Q If you were adding a constant increment on top of
16 whatever those peak flows might be, wouldn't you be
17 tracking the natural?

18 A If you added to the peak flows, instantaneous peak
19 flows and displayed it, then I would say you were
20 correct.

21 HEARING OFFICER DEL PIERO: Excuse me. I don't
22 understand that. Forgive me, but I don't understand
23 that. So I want you to help me out.

24 In a natural hydrograph, you've got a lower end
25 and a high end, and the peak flows in a natural

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01 hydrograph are whatever they are. And the natural
02 system of the stream or the river that's being
03 evaluated will have developed over eons predicated on
04 that natural hydrograph.

05 If you add water to increase the peak flow, is
06 that not going to exceed what the natural hydrograph
07 was?

08 DR. PLATTS: Yes.

09 HEARING OFFICER DEL PIERO: Would that not cause
10 damage either from erosion or modification to the
11 stream channel?

12 DR. PLATTS: Yes, it could.

13 HEARING OFFICER DEL PIERO: Is that what you're
14 recommending?

15 DR. PLATTS: No. I'm --

16 HEARING OFFICER DEL PIERO: I'm sorry. But I
17 really didn't understand what the last comments were.

18 DR. PLATTS: My main point to Counsel was that
19 monthly flows mask out so much that it's very difficult
20 to say that if you did something to a monthly flow and
21 did something to a corresponding monthly flow, that the
22 results would be similar because the spike is going
23 up --

24 HEARING OFFICER DEL PIERO: I understand that,
25 but that's not the issue that I'm asking about. I'm

0034

01 asking about what you said, not related to the
02 uniformity of the elevation of monthly flows that she
03 was talking about. You were talking about adding to
04 the peak flow, at peak-flow times, obviously.

05 Is that not going to cause a scarring or erosion
06 or some unnatural activity going on in that stream
07 channel?

08 DR. PLATTS: Yes, it would. It could.

09 MS. CAHILL: Ms. Anglin, could you mark the
10 question -- just in this general area, the answer about
11 monthly flows?

12 THE REPORTER: Sure.

13 HEARING OFFICER DEL PIERO: I don't mean to take
14 up your time. Maybe I'll explore that on my
15 examination.

16 Q BY MS. CAHILL: Dr. Platts, on the first page of your
17 testimony, you recommend that the Upper Owens River
18 receive bank-full flows at least every three years.
19 You say, "Q-3."

20 Is that Q-3 based on the natural flows in the
21 Upper Owens River?

22 A BY DR. PLATTS: No. That Q-3 is just based on the
23 bank-full flow of the Owens River in its present
24 condition, Upper Owens River.

25 Q So the Q-3 in this case doesn't mean the flow that
0035 would happen every three years?

01 A Not the natural -- no. What flow are you speaking
02 of?
03

04 Q I'm quoting from your testimony on Page 1. You
05 say you, "Recommend the Upper Owens River receive
06 bank-full flows at least once every three years." You
07 say, "Q-3." What do you mean by Q-3?

08 A Yes. That means that's the flow -- Q-3 would mean
09 that's a flow event on the average of once every three
10 years that would top the bank.

11 Q Okay. But that Q-3 doesn't relate to any actual
12 hydrology that's occurred in the period of record?

13 A No.

14 Q Okay. You're just using that as a shorthand for a
15 flow that ought to occur every three years?

16 A Yes. I'm just -- I'm using that to imply that the
17 Q-3 is that flow that, on the average of every -- over
18 a three-year average would top the bank.

19 Q Okay.

20 MR. HERRERA: Excuse me, Ms. Cahill. Your 20
21 minutes has expired.

22 MS. CAHILL: Mr. Del Piero, I know that you are
23 strict on extensions during rebuttal. I would petition
24 for an additional period of 20 minutes. I would expect
25 not to use it all. I took longer with Dr. Orton than I
0036 anticipated. Given that there are two witnesses here,
01 I would ask to be allowed to complete my examination of
02 Dr. Platts.
03

04 HEARING OFFICER DEL PIERO: I'll grant the 20
05 minutes. I would assume you're going to be done in
06 that time.

07 MS. CAHILL: I will certainly be done, and I
08 expect to be done in less.

09 Q BY MS. CAHILL: Dr. Platts, when you testified about
10 the need for over-bank flows, is it true that you said
11 there were some exceptions for spring-fed streams?

12 A There are some exceptions for spring-fed streams
13 that are entirely spring fed.

14 Q With regard to the bank-full flow, did you take
15 your information on bank-full flows from the EBASCO
16 report?

17 A Yes, I did.

18 Q And that's from Table 8 and Table 9 on Pages 48
19 and 49; is that right?

20 A That is correct.

21 Q And in effect, what you did was take the bank-full
22 discharge and take some of those, perhaps eliminating
23 those that weren't representative, added them, and then
24 divided to arrive at an average?

25 A Yes, I did.

0037

01 Q Now, when the average bank-full discharge occurs,
02 isn't it true that some of the points will already be
03 over-bank?

04 A That's correct.
05 Q So in order to arrive at the average bank-full
06 discharge, you're already causing some localized
07 flooding at other cross-sections?
08 A That's correct.
09 Q Do the landowners along the upper portion of the
10 Upper Owens River below The Portal object to flooding
11 on their pastures?
12 MR. BIRMINGHAM: Objection, relevance. The
13 Department of Water and Power has easements over these
14 lands, so whether they object or not is -- whether the
15 landowners object is really irrelevant.
16 HEARING OFFICER DEL PIERO: Mr. Dodge?
17 MR. DODGE: Regardless of what the easement
18 situation is, I don't know what it is, it appears to me
19 that the opinions of the landowners is still relevant.
20 MS. CAHILL: I believe it's relevant. The
21 landowners' testimony addresses a maximum flow that
22 they recommend.
23 HEARING OFFICER DEL PIERO: I'm going to overrule
24 the objection. Do you know the answer, Sir?
25 DR. PLATTS: I don't know the answer, Sir, because
0038
01 I have not asked the landowners whether they objected
02 or not.
03 HEARING OFFICER DEL PIERO: Then let's move on.
04 Q BY MS. CAHILL: Dr. Platts, are fluctuations of 100
05 cfs or more during the non-snow-melt runoff season
06 natural in the Upper Owens River?
07 A BY DR. PLATTS: They would not be natural unless you
08 received a summer rainstorm event of large magnitude.
09 Q Are you aware of the research done by Stromberg
10 and Patton on willows along the Upper Owens River?
11 A No, I'm not.
12 Q You haven't seen the auxiliary report in this
13 matter dealing with that subject?
14 A No. I don't remember it.
15 Q Assuming, hypothetically, that the landowners did
16 object to flows that flooded their pastures, would that
17 affect your recommendation?
18 A No, it would not.
19 Q If the grazing were eliminated on the Upper Owens
20 River and large fluctuations were eliminated, is it
21 likely that the channel would ultimately narrow
22 somewhat?
23 A For clarification, you're saying if there are no
24 fluctuations, would the channel narrow?
25 Q If you had no grazing and relatively constant
0039
01 flows, no daily fluctuations of 100 cfs or more outside
02 the snow-melt season, would you expect that ultimately
03 the channel would narrow?
04 A Yes. You're correct. The channel would narrow
05 without fluctuations, but would not be the channel you
06 would want.
07 HEARING OFFICER DEL PIERO: Excuse me. Why?
08 DR. PLATTS: Because then you would have an inset
09 channel within the Upper Owens River which would be
10 kind of a plugged-up channel and because the Upper
11 Owens tends to transport a lot of fines, a lot of

12 sands, and without fluctuations, you would probably
13 have a very sandy-bottomed river.
14 Q BY MS. CAHILL: Would that be true even if there were
15 fluctuations during the snow-melt period?
16 A BY DR. PLATTS: No. Now you're adding on to the
17 question.
18 Q No. My question originally was outside the
19 snow-melt period.
20 HEARING OFFICER DEL PIERO: That's correct. Her
21 question included the snow-melt fluctuations. That's
22 why I asked the question why because I didn't quite
23 understand your answer.
24 DR. PLATTS: Okay.
25 HEARING OFFICER DEL PIERO: Maybe you didn't
0040
01 understand the question.
02 DR. PLATTS: I didn't understand the answer (sic)
03 completely then. You are correct.
04 Q BY MS. CAHILL: And then, again, with regard to your
05 average bank-full -- even when the average bank-full
06 flow is there, not all the cross-sections would be at
07 bank-full; is that right?
08 A BY DR. PLATTS: That's correct.
09 Q What is the width of the channel above the East
10 Portal?
11 A I don't know right off.
12 Q Is it fair to say the channel is wider below East
13 Portal than it is above?
14 A That would be fair.
15 MS. CAHILL: I believe that's all I have. Thank
16 you.
17 HEARING OFFICER DEL PIERO: Thank you very much.
18 Is it Mr. Dodge or Mr. Flinn?
19 MR. DODGE: It's me.
20 HEARING OFFICER DEL PIERO: Mr. Dodge. Good
21 morning, Sir.
22 MR. DODGE: Good morning.
23 HEARING OFFICER DEL PIERO: You didn't go to the
24 Kings game last night, did you?
25 MR. DODGE: No. I tried to catch Cal versus
0041
01 Arizona on ESPN, but our television doesn't have ESPN.
02 HEARING OFFICER DEL PIERO: I read some
03 stimulating information about what the Environmental
04 Protection Agency's doing on salinity standards in the
05 delta. So I think your evening and mine were on par.
06 CROSS-EXAMINATION BY MR. DODGE
07 Q Dr. Orton, I just have a couple of follow-up
08 questions for you. You told us about your
09 recommendations for flushing flows. Did you have a
10 recommendation for DWP on over-bank flows?
11 A BY DR. ORTON: I told them what kinds of flows would
12 result in minimum over-bank flows.
13 Q What specific numbers did you give them?
14 A As I recall, I told them that flows in the range
15 of -- let's see.
16 MR. BIRMINGHAM: I'm going to interpose an
17 objection on the grounds the question is ambiguous with
18 respect to the stream.
19 HEARING OFFICER DEL PIERO: Sustained. You want

20 to specify, Mr. Dodge?
21 Q BY MR. DODGE: Rush Creek and then Lee Vining Creek.
22 A BY DR. ORTON: I told them that a flow capable of
23 wetting the immediate vicinity of the bank, over-bank
24 flow, in Rush Creek would be approximately 45 cfs.
25 Q And Lee Vining Creek?
0042
01 A In Lee Vining Creek, a little bit less. A couple
02 of cfs less.
03 Q How did you make that calculation?
04 A I made that calculation from looking at the
05 PHABSIM output and the Fish and Game reports and also
06 observations in the field.
07 Q Is there some document where we could find this
08 calculation?
09 A Yes. Either instream flow -- either stream
10 evaluation report.
11 Q Did you make a calculation yourself that we could
12 look at?
13 A I derived the number. A calculation.
14 Q Well, I understood that Dr. Platts, in doing the
15 calculation for the Upper Owens River, took the
16 information, the EBASCO report, and calculated certain
17 averages as to what it would take to reach a full bank
18 flow. Did you do the same thing?
19 A I attempted to. Neither of those reports did what
20 EBASCO did in the sense of having transect data with
21 estimates of over-bank flows for each transect.
22 Q And absent that data, how could you make that
23 calculation?
24 A Weighted usable area curves versus flow in those
25 reports has a curve for fry. And fry weighted usable
0043
01 area versus flow curves typically show a point where
02 the curve changes its slope. And that has, in most
03 cases, a straightforward interpretation that the amount
04 of fry habitat goes down with increasing flows because
05 the velocities pick up. The moment where you reach
06 over-bank flows, you flood the bank and create shallow
07 habitat, and the amount of fry habitat then increases.
08 That point, you know, barring other information,
09 is a good estimate of over-bank flows integrated over
10 the entire stream.
11 Q Dr. Platts, do you agree that such a calculation
12 could be made without the bank-full discharge data
13 that's in the EBASCO report?
14 A BY DR. PLATTS: I have not looked at Rush and Lee
15 Vining at all. I couldn't answer that question.
16 Q Making your recommendations on bank-full flows,
17 you use the EBASCO report in the column bank-full
18 discharge in cfs, correct?
19 A Correct.
20 Q Mr. Hasencamp, do you remember discussions about
21 bank-full discharge flows?
22 A BY MR. HASENCAMP: Yes.
23 Q That those were part of your calculations?
24 A Well, that was part of the overall plan.
25 Q Mr. Tillemans, your depth measurements on Rush
0044
01 Creek, the so-called thalweg measurements -- and I

02 believe there's sort of a schematic of them directly
03 behind you on the board; is that right?
04 A BY MR. TILLEMANS: That's correct.
05 Q How many measurements did you make?
06 A There's over 1500 measurements.
07 Q Okay. And that was in approximately 12,000 feet
08 of stream; is that right?
09 A I think Dr. Beschta's is about 11,700 feet.
10 Q Okay. How many of those measurements resulted in
11 water depth over three feet?
12 A I couldn't tell you. All I did was take the data,
13 and as soon as I got the data, I sent it to
14 Dr. Beschta.
15 Q You don't have the raw data?
16 A I have the data. I took the data. Yes, I have
17 the data.
18 Q You do have the data?
19 A Yes.
20 Q So if we wanted to ask you for the data, we could
21 just count them, couldn't we?
22 A Yes.
23 Q Do you have any order of magnitude as to how many
24 measurements you had in excess of three feet?
25 A No, I don't.

0045

01 Q Less than 100?
02 A I'd have to look at the data.
03 Q Similarly, if I wanted to ask you how often the
04 thalweg measured two feet or less, do you have any
05 estimate of that?
06 A Again, out of 1500, I couldn't give you exact
07 numbers. I think we volunteered the data yesterday,
08 and I'd be more than happy to send it.
09 Q Okay.
10 A I did this at Bob's request and ran it in a couple
11 of days, very limited time, and tried to get as much
12 done as possible. And as soon as I compiled the data,
13 I sent it directly to Bob for some extrapolation.
14 HEARING OFFICER DEL PIERO: That's Dr. Beschta?
15 MR. TILLEMANS: Dr. Beschta, I'm sorry.
16 MR. DODGE: We would ask for that.
17 HEARING OFFICER DEL PIERO: And that's the source
18 of the "B."
19 MR. DODGE: Mr. Chairman, we would ask for that
20 data.
21 HEARING OFFICER DEL PIERO: It was offered
22 yesterday by Mr. Birmingham.
23 You indicated you would have it available by when,
24 Sir?
25 MR. BIRMINGHAM: You said next Friday. We said

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01 we'd get it as early in the week as possible.
02 HEARING OFFICER DEL PIERO: Do you have any idea
03 at this point as to when it will be available?
04 MR. BIRMINGHAM: I think Mr. Tillemans has some of
05 the data here with him, but not all of it. That data
06 that he has with him, we could provide it now.
07 MR. FLINN: If it's available in electronic media
08 such as an ASCII file, we would request it in that
09 form.

10 HEARING OFFICER DEL PIERO: Do we know that?
11 Mr. Tillemans, is it available in that media?
12 MR. TILLEMANS: Dr. Beschta, how he compiled the
13 graphs or whatever, I think may be on a disk.
14 HEARING OFFICER DEL PIERO: Floppy?
15 MR. TILLEMANS: You would have to ask Dr. Beschta.
16 I'm not sure.
17 HEARING OFFICER DEL PIERO: Have you made
18 arrangements for duplication of the information yet,
19 Mr. Birmingham?
20 MR. BIRMINGHAM: No, we have not.
21 HEARING OFFICER DEL PIERO: Let me ask,
22 Mr. Birmingham, between now and the end of the day, if
23 you would be good enough to be able to answer one,
24 whether or not it's on a floppy --
25 MR. BIRMINGHAM: We can find that out within five
0047
01 minutes.
02 HEARING OFFICER DEL PIERO: And two, if it's
03 possible to have those duplicates made as soon as
04 possible. I know I told you Friday of next week. If
05 it's possible to have them made as soon as possible --
06 at this point, it would probably be nice if our Staff
07 had them so we could take a look at that background
08 information, also.
09 MR. BIRMINGHAM: Absolutely.
10 HEARING OFFICER DEL PIERO: Okay.
11 Q BY MR. DODGE: You told me you couldn't tell me how
12 many of the thalwegs were greater than three feet, nor
13 could you tell me how many were two feet or less.
14 Would you agree that there were --
15 MR. BIRMINGHAM: Objection --
16 MR. DODGE: I haven't even finished the question
17 yet.
18 MR. BIRMINGHAM: I'm sorry, Mr. Dodge.
19 MR. DODGE: Excuse me, Mr. Chairman. I didn't
20 mean to speak to Mr. Birmingham directly.
21 HEARING OFFICER DEL PIERO: The objection was
22 withdrawn. Go ahead and ask your question.
23 Q BY MR. DODGE: You told me you couldn't tell me how
24 many of the thalwegs were greater than three feet nor
25 could you tell me how many were two feet or less.
0048
01 Would you agree that the latter was more common than
02 the former?
03 MR. BIRMINGHAM: I'm going to object on the
04 grounds it misstates the evidence. Mr. Tillemans said
05 he couldn't tell Mr. Dodge the number that were in
06 excess of three feet or are shallower than three feet
07 without looking at the data. I don't think
08 Mr. Tillemans said he couldn't answer that question.
09 HEARING OFFICER DEL PIERO: I'm going to overrule
10 the objection.
11 Mr. Tillemans, do you understand Mr. Dodge's
12 question?
13 MR. TILLEMANS: Could I have it reread, please?
14 HEARING OFFICER DEL PIERO: Certainly.
15 (Whereupon the record was read by the Reporter.)
16 THE WITNESS: Yes.
17 Q BY MR. DODGE: By a substantial margin?

18 A MR. TILLEMANS: I'd have to look up figures to tell
19 you how much.
20 Q Were you here yesterday when Dr. Hardy was talking
21 about 25 cfs in Rush Creek in the winter?
22 A Yes.
23 Q And you were looking at it at 80 cfs; is that
24 right?
25 A Yes. 80 cfs, 79.

0049
01 Q How would 25 cfs affect the depths that you
02 measured?
03 A I think that's a question you should probably ask
04 Dr. Beschta.
05 Q Well, you've spent a lot of time on that stream.
06 You don't have an opinion?
07 MR. BIRMINGHAM: I'm going to object on the
08 grounds that it calls for an opinion that is beyond the
09 scope of Mr. Tillemans' expertise.
10 HEARING OFFICER DEL PIERO: I'm going to sustain
11 the objection.
12 He indicated he thought someone else was more
13 qualified to answer the question. We've allowed that
14 on the part of all parties, Mr. Dodge.
15 MR. DODGE: May I speak to that point? If the
16 objection is that there's someone else more qualified
17 in the world to answer a question, we'd have very few
18 answers in this proceeding. I think this man is
19 qualified to answer that question.
20 MR. BIRMINGHAM: Maybe Mr. Dodge would like to try
21 and lay a foundation, but the basis of my objection is
22 whether or not Mr. Tillemans can answer it. In my
23 view, it goes beyond the scope of his expertise.
24 HEARING OFFICER DEL PIERO: I thought
25 Mr. Tillemans answered it. I thought Mr. Tillemans

0050
01 said that -- perhaps he's not as direct as he could
02 have been, but he said he didn't know the answer.
03 MR. DODGE: No. He said he'd like Dr. Beschta to
04 answer it. That's different than saying, "I don't know
05 the answer."
06 MR. BIRMINGHAM: In addition, Mr. Del Piero, when
07 we started this this morning, I suggested that it would
08 be better if Mr. Tillemans testified --
09 HEARING OFFICER DEL PIERO: I understand that,
10 and, Mr. Birmingham, please understand, I'm keeping
11 that very much in mind and that's why I sustained your
12 objection.
13 And, Mr. Dodge, Mr. Birmingham made a suggestion.
14 If you wish to lay a foundation you can go ahead and do
15 that, and we'll see if we get to that point.
16 Q BY MR. DODGE: Rush Creek is shallower at 25 cfs than
17 it is at 80, isn't it?
18 A BY MR. TILLEMANS: I would expect that.
19 Q How did you make these depth measurements? Did
20 you have a stick with feet and inches on it?
21 A I had a survey rod that I obtained from our survey
22 crews. It was a plastic survey rod. It extends out to
23 20 feet in five-foot increments, and it's hashed out in
24 tenths of a foot. And it's an oblong-shaped type rod
25 that's very light.

0051

01 Q And you just cram it into the stream and make a
02 reading. Is that what you do?
03 A I didn't cram it into the stream.
04 Q What do you do?
05 A When you take a thalweg profile, you take the
06 deepest thread of the main channel, which is what I was
07 doing, I was measuring the main channel. And you walk
08 up the center of the stream, and the increments I did
09 are three steps. And you take a line right across the
10 stream in the third step and find the deepest spot and
11 take your reading.
12 Q And does the accuracy of the reading depend on
13 getting the stick vertical?
14 A Yes.
15 Q And if the stick is not vertical, then by
16 definition, the measurement will be greater than the
17 actual depth; is that right?
18 A Correct.
19 Q If we sent someone out there, could we duplicate
20 your results with some accuracy?
21 A I think so. I think if somebody did a width and
22 depth thalweg profile like I did using that survey rod,
23 that I would be very surprised if they couldn't
24 duplicate what I did.
25 Q Dr. Platts?

0052

01 A BY DR. PLATTS: Yes.
02 Q This may be our last meeting.
03 MR. BIRMINGHAM: Don't count on it, Mr. Dodge,
04 unless you're retiring.
05 HEARING OFFICER DEL PIERO: Oh, ye of little
06 faith, Mr. Birmingham.
07 MR. ROOS-COLLINS: Mr. Dodge shows signs of
08 optimism.
09 HEARING OFFICER DEL PIERO: No. He shows signs of
10 approaching Social Security age.
11 (Laughter.)
12 MR. DODGE: Dr. Platts and I are in a head-long
13 race to do that.
14 DR. PLATTS: I think I'll beat you.
15 Q BY MR. DODGE: Dr. Platts, you are critical of DFG
16 recommendations on Upper Owens River because the 200
17 cfs is not a bank-full flow.
18 A BY DR. PLATTS: That's correct.
19 Q Okay. Now, I'll get to that in a minute.
20 Let me ask you, pre-1940, was 200 cfs a bank-full
21 flow for the Upper Owens River?
22 A I did not check that out, but it sounds
23 reasonable.
24 Q It was a smaller river, then, wasn't it?
25 A Yes, it was.

0053

01 Q And it has been -- the size of the river has been
02 increased by the artificial Mono Basin flows from 1943
03 to 1989?
04 A Yes, and other factors.
05 Q Now, hypothetically, if the Upper Owens River were
06 to receive no Mono Basin water, would the channel of
07 the Upper Owens River gradually return to its historic

08 channel over time?
09 A Yes, it would, gradually.
10 Q Okay. And then if that happened, then 200 cfs
11 might be an adequate over-bank flow?
12 A Yes. Once the channel is reestablished.
13 Q Okay. But today, your testimony is that it takes
14 approximately 300 to over-bank, correct?
15 A That's correct.
16 Q Okay. So what you're telling us is that the Upper
17 Owens River today needs 300 cfs to over-bank -- to
18 maintain basically the degraded channel of the Upper
19 Owens River?
20 A That's not correct.
21 Q You don't agree that the high flows from 1940 to
22 1989 degraded the channel?
23 A I do agree with that. I don't agree with your
24 previous statement.
25 Q Okay. This over-bank flow once every three years,
0054
01 for how many days are you recommending that?
02 A I did not state for how many days.
03 Q That was kind of the point of my question, to see
04 whether you were going to state it.
05 A No, I did not. There was not enough in the EBASCO
06 report to allow that.
07 Q The over-bank flows could come in wet years, could
08 they?
09 A Yes, they could.
10 Q And in a wet year, the average highest daily flow
11 naturally of the upper -- excuse me, Sir. The highest
12 daily average flow absent Mono Basin imports in the
13 Upper Owens River, say, at East Portal is approximately
14 what?
15 A I'd say a little over 200 cfs.
16 Q So you're talking about, in that situation, adding
17 about 100?
18 A Yes.
19 Q Now, in terms of goals, let me try to talk about
20 goals. Hypothetically, if we want to retain the
21 present Upper Owens River channel, your testimony is
22 that we need 300 cfs for bank-full flows?
23 A That's incorrect.
24 Q How is that incorrect?
25 A The reason that I recommended that we have the
0055
01 bank-full flows is so that we don't have to live with
02 the present Owens River channel bank.
03 Q Okay. But hypothetically, again, if we wanted to
04 restore the pre-1940 channel on the Upper Owens River,
05 then 200 cfs would be adequate for bank-full flows?
06 A That's correct. If you wanted to go back to the
07 old channel, 200 cfs would do it. But it would be a
08 longer period of time than if you had 300 cfs to drive
09 the system for the first part of the rehabilitation
10 period.
11 Q Now, Ms. Cahill asked you a series of questions
12 about spring-fed, et cetera, things like that, and
13 whether the Upper Owens River naturally was relatively
14 constant compared to snow-fed streams. Let me see if I
15 can get to the bottom of this.

16 As I understand it, DFG recommends a relatively
17 constant input to the Upper Owens River from the Mono
18 Basin, correct? That's their recommendation?

19 A I interpreted it that they recommended constant
20 flows in the Owens -- Upper Owens River regardless of
21 the water source.

22 Q Oh, I see. Now, hypothetically, if DFG were to
23 recommend a relatively constant input to the Upper
24 Owens River from the Mono Basin, you wouldn't have a
25 problem with that?

0056

01 A No, I would not.

02 Q I have a couple of questions about ramping, Sir.
03 Now, you suggested a maximum change from the prior day
04 of 10 percent, right?

05 A At certain flows, yes.

06 Q At certain flows. You're right. When the Upper
07 Owens River is at excess -- I see you have your reading
08 glasses today.

09 A Yeah. These are better.

10 Q When the Upper Owens River is in excess of 100
11 cfs, you have a maximum ramp of 10 percent?

12 A That's correct.

13 Q Let me ask you first, is that sort of judgmental
14 in the sense that reasonable professionals might
15 disagree?

16 A Yes, it is. It's judgmental.

17 Q Some would have a higher number and some would
18 have a lower number?

19 A That's correct.

20 Q Okay. Now, you didn't, in your testimony, put a
21 cite for the 10 percent, but it turns out that one cite
22 might be your own article, correct?

23 A Yes. That's correct.

24 Q In fact, I think it's DFG Exhibit 72; is that
25 right?

0057

01 A I didn't know if it was an exhibit or not.

02 Q I've got it in this folder somewhere, Sir.
03 Ecological and Geomorphological Concepts for Instream
04 and Out-of-Channel Flow Requirements, by Hill, Platts,
05 and Beschta, right?

06 A That's correct.

07 Q And that suggests 10 percent, doesn't it?

08 A It does.

09 Q Your article also says that less than 10 percent
10 is, quote, highly preferred, end quote. Do you
11 remember that?

12 A I do.

13 Q Why is it highly preferred?

14 A I think our thinking on that is it represent more
15 of the natural hydrograph.

16 Q The 10 percent, Sir, in your experience, I know
17 you have a lot of it, is that a commonly-used ramping
18 criteria?

19 A Yes -- I don't know if it's a commonly-used
20 ramping criteria. It's a commonly-used figure for
21 recommendations.

22 Q You don't know -- it's commonly recommended, but
23 you're not sure whether it's instituted commonly?

24 A I'm not sure.
25 Q Okay. Would you agree with me that DFG's 10
0058
01 percent recommendation for ramping is within the range
02 of reason?
03 A Yes.
04 Q And would you also agree that since ramping
05 criteria of less than 10 percent are, to quote your
06 article, highly preferred, that DFG could reasonably
07 have set a lower ramping criterion, particularly on the
08 downward leg?
09 MR. BIRMINGHAM: Excuse me. I'm going to object
10 again on the grounds that the question is vague and
11 ambiguous with respect to stream.
12 HEARING OFFICER DEL PIERO: I'm going to sustain
13 the objection because it's vague, not necessarily that
14 it's ambiguous, although it may well be as to stream,
15 too. I thought the line of questioning was pretty
16 clear with regard to the stream.
17 I wasn't quite sure, Mr. Dodge, what it was.
18 Would you be kind enough to restate it? I'd appreciate
19 it.
20 Q BY MR. DODGE: You said in your article that a
21 ramping rate of less than 10 percent is highly
22 preferred, correct?
23 A BY DR. PLATTS: I believe that's correct. I don't
24 know if we said "highly" or not.
25 Q Well, at this point in our relationship,
0059
01 Dr. Platt, will you take my word for it or not?
02 A I will take your word for it.
03 Q Now, my question, I think is a simple one, given
04 that a ramping rate of less than 10 percent is highly
05 preferred, wouldn't it have been entirely reasonable
06 for DFG to propose a ramping criterion of less than 10
07 percent?
08 A This would depend what stream you're talking about
09 because the ramping rate depends on streams, on how
10 their flow regimes are operating. So I could not
11 answer that question.
12 Q In terms of establishing a ramping rate, you don't
13 recommend using the maximum daily change that a stream
14 experiences naturally and setting that out as the
15 ramping rate, do you?
16 A No, I do not. It's a matter of consideration, but
17 it wouldn't be your total consideration.
18 Q There would be other factors, would there?
19 A Right.
20 Q Let me ask you to take a look at 1981.
21 Mr. Hasencamp told us yesterday in Figure 2 that this
22 was a normal year, and he noted the daily changes there
23 from April through July of 1981, if you look at the
24 bottom half of the page.
25 Would you agree with me that, for that normal
0060
01 year, 1981, there are very few daily changes that
02 exceed 10 percent?
03 A That's correct.
04 Q And there are, Sir, if I may look over your
05 shoulder here, there are a couple of days in April

06 where it does go over 30 percent. Two days, in fact.
07 Now, you wouldn't recommend establishing a ramping
08 criterion based on two days, would you?

09 A Restate your question.

10 Q Yes. There were two days in 1981 where the daily
11 changes exceeded 30 percent. I just want to establish
12 with you that you wouldn't recommend establishing a
13 ramping criterion based on those two days?

14 A I would not.

15 Q Now, I'm going to change subjects with you, Sir.
16 You had a comment yesterday that peaked my interest.
17 You said the IFIM method did not take into account
18 habitat, but that maybe the Tennant method did take
19 habitat into account. Could you expand on that?

20 A Well, the IFIM model relates mainly to depth and
21 velocity as it relates to a fish surviving, and the
22 Tennant method relates more to trying to get a certain
23 percentage of a natural flow.

24 And my comment to that is that I believe the
25 Tennant method would have a better chance of developing

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01 a flow that would be of more benefit to habitat than
02 just developing a flow that was developed just mainly
03 for fish in order to rear and feed.

04 Q Does the Tennant method, in addition to
05 establishing percentages of average mean flow, does it
06 also require the person establishing or recommending
07 flows to observe the stream from time to time?

08 A I believe it does.

09 Q In fact, it requires the person to observe the
10 stream at 60 percent of average mean flow; is that
11 right?

12 A I believe you're right.

13 Q And also 30 percent?

14 A It could be.

15 Q How about 10 percent?

16 A I don't know.

17 Q Have you made those observations? Would you be in
18 a position to apply the Tennant method?

19 A To what stream?

20 Q Rush Creek or Lee Vining Creek?

21 A Oh, no. I would not.

22 MR. HERRERA: Excuse me, Mr. Dodge. Your 20
23 minutes has expired.

24 MR. DODGE: I would apply for an additional five
25 minutes, Mr. Del Piero.

0062

01 HEARING OFFICER DEL PIERO: Justification,
02 Mr. Dodge?

03 MR. DODGE: Justification is I have a few more
04 questions.

05 No. Seriously. They put four people on a panel
06 and take an hour and 20 minutes. If it were one
07 witness, I could understand it.

08 HEARING OFFICER DEL PIERO: That's the
09 justification, Mr. Dodge. Granted.

10 MR. DODGE: And I won't even take the five.

11 HEARING OFFICER DEL PIERO: Okay.

12 Q BY MR. DODGE: In any event, someone who's going to
13 apply the Tennant method, it's not simply a matter of

14 getting out the calculator and doing some
15 multiplication, you also have to observe the stream at
16 various flows; is that right?
17 A To be successful, I'd say so.
18 Q Do you think Dr. Hardy has done that?
19 A I don't know. I've never been in the field with
20 Dr. Hardy.
21 Q You tell him I'm going to ask him on the 24th,
22 will you?
23 Have you looked at Dr. Kondolf's recommendation
24 for Rush Creek flushing flows?
25 A No, I have not.

0063

01 Q If I showed it to you, would you be able to tell
02 me whether you think it's good, bad, or indifferent?
03 A Just in a brief period of time?
04 Q Yes.
05 A Probably not.
06 Q Do you have any idea what bank-full flows on Rush
07 Creek would be?
08 A No, I've never looked.
09 Q Do you think it's quite unlikely that it would be
10 as low as 45 cfs?
11 A I think that's kind of unlikely.
12 MR. DODGE: That's all I have. Thank you, Sir.
13 HEARING OFFICER DEL PIERO: Mr. Roos-Collins?
14 MR. ROOS-COLLINS: Mr. Del Piero, I request that
15 Los Angeles determine whether Mr. Barnes is available
16 to testify before I begin my cross-examination. I need
17 to inform Ms. Koehler, who is in San Francisco, whether
18 she needs to drive up to Sacramento today.
19 HEARING OFFICER DEL PIERO: Mr. Birmingham?
20 MR. BIRMINGHAM: I'm informed that Mr. Barnes is
21 available today.
22 HEARING OFFICER DEL PIERO: Okay. He is
23 available. Now, do you wish to make a request?
24 MR. ROOS-COLLINS: I request a five-minute recess
25 so that I can so inform Ms. Koehler and ask her to come

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01 to Sacramento.
02 HEARING OFFICER DEL PIERO: I assume she's going
03 to examine him? It's your intent to have Ms. Koehler
04 examine Mr. Barnes?
05 MR. ROOS-COLLINS: Yes.
06 MR. BIRMINGHAM: Before we do that, can I confer
07 with Counsel because it's now ten o'clock? We have, in
08 addition to Mr. Barnes today, we have Mr. Miller.
09 Mr. Hanson is here to present rebuttal to rebuttal
10 testimony, and then we have a Department of Fish and
11 Game employee. That may take up the whole day, and if
12 Ms. Koehler hasn't left San Francisco yet --
13 HEARING OFFICER DEL PIERO: Ladies and Gentlemen,
14 I'm going to take a ten-minute recess.
15 Mr. Birmingham, Mr. Dodge, Mr. Roos-Collins,
16 Ms. Scoonover, Ms. Cahill, I strongly recommend the
17 five of you get together and decide how you wish to
18 proceed so can you tell me after the break.
19 MR. BIRMINGHAM: Thank you.
20 HEARING OFFICER DEL PIERO: Thank you.
21 (Whereupon a brief recess was taken.)

22 HEARING OFFICER DEL PIERO: Ladies and Gentlemen,
23 this hearing will again come to order.
24 I understand you have good news for me,
25 Mr. Birmingham?

0065
01 MR. BIRMINGHAM: I have some news -- the good
02 news -- we conferred during the recess and concluded
03 that with the witnesses we have here today, we will
04 have a full day. So Mr. Barnes will not be here today,
05 but we believe he will be here on Tuesday.
06 Also, we have the thalweg profile data on disk --
07 HEARING OFFICER DEL PIERO: Floppy?
08 MR. BIRMINGHAM: Floppy disks, yes. We will have
09 them copied over the weekend so they will be available
10 for anyone who wants them on Monday in the afternoon or
11 Tuesday morning. We will bring copies to the Board
12 for --
13 HEARING OFFICER DEL PIERO: Where would they pick
14 them up on Monday in the afternoon?
15 MR. BIRMINGHAM: They can pick them up at our
16 office in the afternoon. Our office will be closed on
17 Monday, but Mr. Pollack can be reached by telephone.
18 HEARING OFFICER DEL PIERO: Okay.
19 MR. POLLACK: Am I supposed to give my phone
20 number?
21 MR. BIRMINGHAM: What is your direct-dial number?
22 MR. POLLACK: I'm afraid I don't know off the top
23 of my head. You have to call 321-4500.
24 HEARING OFFICER DEL PIERO: Mr. Flinn? Let me
25 introduce you to one of your brethren at the lower end

0066
01 of the food chain.
02 MR. FLINN: We bottom dwellers stick together.
03 HEARING OFFICER DEL PIERO: I assume, Mr. Pollack,
04 you'll secure that phone number and make it available
05 to the parties.
06 MR. POLLACK: I think I'm doing that right now,
07 Mr. Del Piero.
08 HEARING OFFICER DEL PIERO: Thank you, Sir.
09 Mr. Roos-Collins, are you prepared to examine
10 these witnesses?
11 MR. ROOS-COLLINS: I am prepared.
12 HEARING OFFICER DEL PIERO: Ready?
13 MR. ROOS-COLLINS: Ready.
14 HEARING OFFICER DEL PIERO: Good. Let's proceed.
15 CROSS-EXAMINATION BY MR. ROOS-COLLINS
16 Q Good morning. Mr. Tillemans, let me begin with
17 you. Yesterday, Los Angeles offered or, rather,
18 introduced into evidence a 1931 map identified as L.A.
19 DWP 140. You found that map in the garage at the Cain
20 Ranch this week?
21 A BY MR. TILLEMANS: Yes, three days ago.
22 Q Did you see any other old papers in the garage?
23 A On that day --
24 HEARING OFFICER DEL PIERO: No objections based on
25 ambiguity?

0067
01 I'm sorry. Please answer the question.
02 MR. TILLEMANS: Yes, I did.
03 Q BY MR. ROOS-COLLINS: Did you see a pre-1941 fish

04 population survey, by any chance?
05 A BY MR. TILLEMANS: No, I didn't.
06 MR. SMITH: That's really --
07 Q BY MR. ROOS-COLLINS: Do me a favor, please, next
08 time you're in the garage, do look for a pre-1941 fish
09 population survey and apprise us if you find it?
10 A BY MR. TILLEMANS: Well, it wasn't on that shelf
11 because I looked.
12 Q Thank you.
13 MR. BIRMINGHAM: I think, for those people that
14 haven't been to the Cain Ranch facility that
15 Mr. Tillemans was using, it's quite a place. It's an
16 old storeroom, and I would love to go through it
17 sometime, but for the fear of very large animals living
18 among the archives.
19 MR. FLINN: They say Mr. Downey can be found
20 there.
21 (Laughter.)
22 MR. FLINN: I had to do that after his crack about
23 my examinations.
24 HEARING OFFICER DEL PIERO: Okay. Now we're
25 even.

0068

01 Mr. Roos-Collins, you better get going so we don't
02 have any more of those.
03 Q BY MR. ROOS-COLLINS: Mr. Tillemans, do you have
04 Dr. Beschta's rebuttal testimony before you?
05 A BY MR. TILLEMANS: I think so, yes.
06 Q Why don't you take a moment to locate Page 6 of
07 Dr. Beschta's rebuttal testimony?
08 A Could you direct me to the page again, please?
09 Q Page 6, Paragraph 4, which sets forth the channel
10 width measurements you have previously discussed.
11 A Okay.
12 Q You participated in the field measurements on
13 December 13th and 15th, 1993?
14 A No, I didn't.
15 Q Have you reviewed the data taken on December 13th
16 and 15th, 1993?
17 A Yes. I've looked at them briefly.
18 Q Is it correct that Paragraph 4 shows that the
19 width measured on December 13th and 15th, 1993, was 31
20 feet on average?
21 A That's correct.
22 Q And on January 3rd and 4th, 1994, it was 24 feet
23 on average?
24 A That's correct.
25 Q Did Rush Creek get seven feet narrower between
0069
01 December 13th and January 4th?
02 A No, it didn't.
03 Q How do you explain that seven-foot difference?
04 A Because the widths that were compiled by my data
05 were -- I can't remember the exact number now, 730 some
06 odd widths or whatever. And this width data is very --
07 it was only taken from a few points. I think they're
08 like 20 to 30 points, and what I -- I need to back up a
09 little here on this.
10 What we originally preferred was to have a survey
11 crew go in and do a complete thalweg profile, channel

12 cross-sections, a whole study for us as quickly as
13 possible, but the survey supervisor was not equipped to
14 have his men in the creek at cold temperatures when
15 there was a snowstorm that just came in on that date.
16 There were cold temperatures, and the supervisor would
17 not give us the data we wanted because of safety
18 constraints. And, therefore, that necessitated me to
19 get out in the creek and do a thalweg profile, and
20 that's the data that Dr. Beschta was using.

21 Q Mr. Tillemans, I meant no criticism of the City of
22 Los Angeles for the manner in which this data were
23 collected. I am simply attempting to understand how we
24 can relate the data collected on different days.

25 Let me ask you a different question --
0070

01 A I --

02 Q Excuse me. Do you have further explanation to
03 offer?

04 A I think to relate that data with the data I've
05 taken is not appropriate to make the same conclusions
06 from it.

07 Q So in Paragraph 4 on Page 6 of Dr. Beschta's
08 rebuttal testimony, we should compare the data
09 collected in May of 1991 with the data collected in
10 January 1994, and we should exclude the data collected
11 in December 1993?

12 MR. BIRMINGHAM: I'm going to object. We had an
13 understanding when we started this that Mr. Tillemans
14 was going to be questioned about the work that he did.
15 He's now being asked to interpret the work that
16 Dr. Beschta did based upon work that Mr. Tillemans did
17 in the DWP survey. This is a question that needs to be
18 asked of Dr. Beschta.

19 MR. ROOS-COLLINS: That's a fair objection. I
20 withdraw the question.

21 HEARING OFFICER DEL PIERO: Fine.

22 Q BY MR. ROOS-COLLINS: Mr. Tillemans, let me ask you
23 one further question, though, about the data you did
24 gather in January of this year.

25 Did you gather data at the transects -- or rather
0071

01 stations identified in Figure 1 of Dr. Beschta's
02 rebuttal testimony?

03 A I could. If the thalweg profile is continuous
04 through the stream in that section I did. So whether
05 my points landed exactly on that station that the
06 survey did or not, I couldn't tell you.

07 Q Dr. Orton?

08 A BY DR. ORTON: Mr. Roos-Collins.

09 Q Your resume states that your thesis for your
10 second doctorate is entitled Inventing The Public Trust
11 Doctrine, California Water Law and the Mono Lake
12 Controversy. Is that correct?

13 A That's correct.

14 Q Two questions. First, is that thesis a public
15 document?

16 A Yes.

17 MR. ROOS-COLLINS: I request, Mr. Birmingham, that
18 the document be made available to us.

19 MR. BIRMINGHAM: I presume that it's in the

20 library at the University of California at Los
21 Angeles.

22 MR. ROOS-COLLINS: Thank you.

23 HEARING OFFICER DEL PIERO: Excuse me. Where is
24 it, Dr. Orton?

25 DR. ORTON: It is in the UCLA library. There's
0072

01 several. They placed it in an odd place because the
02 department is the Department of Environmental Science
03 and Engineering, and so they placed it in, I think, the
04 math sciences library.

05 MR. BIRMINGHAM: Dr. Orton, do you have additional
06 copies available?

07 DR. ORTON: I have one copy available.

08 MR. BIRMINGHAM: Can you give that to
09 Mr. Roos-Collins, please?

10 HEARING OFFICER DEL PIERO: Dr. Orton, you have it
11 available now? How many pages is it,
12 Dr. Orton?

13 DR. ORTON: It's like 300 something.

14 MR. ROOS-COLLINS: Since I asked for it, I will
15 make copies available to this Board and also to the
16 other parties which wish to obtain it, and I thank
17 Mr. Birmingham and Dr. Orton for the cooperation in
18 providing it.

19 HEARING OFFICER DEL PIERO: Fine.

20 Q BY MR. ROOS-COLLINS: Dr. Orton, an invention has an
21 inventor. When you titled your thesis Inventing the
22 Public Trust Doctrine, who, in your opinion, invented
23 the doctrine?

24 A BY DR. ORTON: The doctrine's earliest roots -- and I
25 don't want to go through the whole dissertation. The

0073
01 doctrine's earliest roots go back to the Institutes of
02 Justinian and probably before that. It's been being
03 invented for a very long time.

04 Q In the interest of time, I will read your thesis
05 before I ask the questions on that subject.

06 Let me turn now to --

07 HEARING OFFICER DEL PIERO: I appreciate that very
08 much, Mr. Roos-Collins. The foundational questions
09 might take a tad longer than I'm willing to grant you
10 time for.

11 UNIDENTIFIED SPEAKER: Check on Justinian's
12 availability.

13 Q BY MR. ROOS-COLLINS: I will note that there are many
14 expert witnesses in this proceeding but Dr. Orton is
15 the only expert, to my knowledge, with a double
16 doctorate, both a biologist and a historian
17 understanding Roman law.

18 Let me turn to a subject somewhat closer to your
19 rebuttal testimony. Are you familiar with
20 Dr. Beschta's direct testimony in this proceeding?

21 A BY DR. ORTON: Yes, I believe so.

22 Q Let me read a paragraph from Page 38 of his direct
23 testimony and ask if you agree with it. Quote, if Rush
24 and Lee Vining Creeks are to be restored, the dynamics
25 of the natural flow regime below the points of

0074
01 diversion must somehow be simulated. Retaining this

02 variability in flows is as important as setting the
03 minimum instream flow, end of quotation.

04 Do you agree with that?

05 A Yes. There's a variation that occurs on many time
06 scales and different spatial scales in these streams.
07 They are highly variable at every time scale, daily,
08 weekly, monthly, et cetera. So in general, I agree
09 with that statement.

10 Q Thank you.

11 Let me turn now to your testimony under
12 cross-examination by Mr. Dodge that you used the fry
13 curves for the Upper Owens River -- excuse me, for Rush
14 and Lee Vining Creeks in developing your
15 recommendations for flows in those creeks. Do you
16 recall your testimony on that subject?

17 A I think so, yes.

18 Q Are you familiar with Department of Fish and Game
19 Exhibit 62, which is the Upper Owens River Stream
20 Evaluation Report 93-1?

21 A Somewhat.

22 Q Let me ask you to turn to Page 48 of that report.
23 Do you have it before you?

24 A I do not.

25 Q Excuse me. Page 105, and I will provide you my
0075 copy.

02 Referring to Figures 38 through 41, please study
03 them and tell me when you're ready to discuss them.

04 A Okay.

05 Q Is it your understanding that Figures 38 through
06 41 on Pages 104 and 105 of DFG Exhibit 62 show trout
07 habitat/stream flow relationships for the Upper Owens
08 River?

09 A For brown and rainbow trout, yes.

10 Q And focusing specifically on the curve for
11 spawning, is that the curve to which you were
12 referring -- excuse me. Were you referring to the
13 curve for spawning in the Rush and Lee Vining Creek
14 reports in your answer to Mr. Dodge's question?

15 A No, I was not.

16 Q You were referring to a curve for fry?

17 A That is correct.

18 Q And you see no fry curve in these figures?

19 A That is correct.

20 Q Dr. Platts, how does the fishery habitat below
21 East Portal today compare with the habitat that existed
22 before 1941?

23 A BY DR. PLATTS: It's less productive.

24 Q Why?

25 A Because the channel has been over-widened.
0076

01 There's more stream bank erosion.

02 Q Do you have a copy of DFG 62 in front of you?

03 A What's the title?

04 Q The Upper Owens River Stream Evaluation Report?

05 A Yes, I do.

06 Q Excuse me, Dr. Orton. May I borrow back my copy?

07 Dr. Platts, I asked you to turn to Page 36 of that
08 report, Figure 17. Is it your understanding that that
09 figure shows the extent to which the Upper Owens River

10 has widened between the 1859 land survey and 1990?
11 A Yes.
12 Q On Page 34, that report states, "This widening is
13 likely the result of increased flows caused by opening
14 and operating Mono Craters Tunnel." Do you agree?
15 A You're reading this on Page 34 at what point?
16 Q The second full paragraph.
17 A Now, would you -- the question once more, please?
18 Q Do you agree with the opinion expressed in that
19 paragraph that, "This widening is likely the result of
20 increased flows caused by opening and operating Mono
21 Craters Tunnel"?
22 A I wouldn't completely agree with that.
23 Q Would you agree that opening and operating Mono
24 Craters Tunnel was a principal cause for the widening
25 referred to on Page 34 and illustrated in Figure 17?

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01 A Yes, I would.
02 Q Let me ask you to turn now to Pages 38 and 39 of
03 the same report, Table 5. Is it your understanding
04 that this table shows a net loss of 19,107 feet in
05 channel length between 1944 and 1990 in the Upper
06 Owens?
07 A Yes.
08 Q Do you have any reason to dispute that estimate?
09 A No, I do not.
10 Q Let me ask you about a paragraph -- a statement in
11 the paragraph on Page 39 following Table 5. "The Owens
12 River on the Inaja property," that's I-N-A-J-A,
13 "provides for comparison and control to the rest of the
14 Upper Owens River in which high flows augmented by
15 diversion from the Mono Craters Tunnel and land
16 management practices have decreased stream bank
17 stabilities and reduced overall channel length."
18 Do you agree with that statement?
19 A Yes. I would agree with that.
20 Q Finally, let me ask you to turn to Table 6 --
21 A Could I make a comment?
22 Q Please.
23 A In the questioning of the channel widening as
24 being the primary cause or resulting from the
25 over-widening, we need to remember that those channels

0078

01 were in extremely poor condition before The Portal
02 discharges started. In other words, those channels
03 were pretty badly eroded before that time, so they were
04 set up for this to happen.
05 Had the Owens River been in excellent condition,
06 the results of The Portal discharge would have been
07 quite different.
08 Q What's the basis for your opinion that the Upper
09 Owens River's channel was in a degraded state before
10 1941?
11 A Based on the photographs I've seen that were shot
12 in the 1930s.
13 Q Do you know whether those photographs are in the
14 record of this proceeding?
15 A No, I do not.
16 Q Let me ask you to turn to Page 36, final
17 paragraph, where the report states, "As described above

18 in the geomorphology section, the Upper Owens River is
19 an anastomosing," A-N-A-S-T-O-M-O-S-I-N-G, "river in
20 which sinuosity increases over time and hydrologic
21 deficiency of the channel decreases. With the decrease
22 in channel efficiency, over-bank flows are more likely
23 to occur and cause meander cut offs or new eroded
24 channels where over-bank flows coalesce back into the
25 main channel. This process is typically very slow in

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01 natural channels that have relatively small
02 fluctuations in flows under natural hydrologic
03 conditions for all vegetative stream banks and relative
04 cohesive bank sediments."

05 Based on your prior -- your answer to my prior
06 question, is it your opinion that this paragraph is
07 incorrect if it is applied to the Upper Owens River
08 before 1941?

09 A This paragraph here is applying to natural
10 channels. The Upper Owens River was not a natural
11 channel prior to the diversion of waters.

12 Q You previously testified, in answer to questions
13 put to you by Mr. Dodge and Ms. Cahill, that the
14 channel form of the Upper Owens River might narrow if
15 no Mono Basin water were imported. Was that your
16 testimony?

17 A Yes. It would be a slow process, but it would.

18 Q And, in turn, if the import from the Mono Basin
19 were reduced from the 1941 through 1985 average as a
20 result of this Board's order, you would also expect a
21 narrowing of the channel over time; is that correct?

22 A I would expect that.

23 Q Yesterday, during your direct examination by
24 Mr. Birmingham, you indicated that the City of Los
25 Angeles is undertaking various initiatives to improve

0080

01 the management of the lands that it owns along the
02 Upper Owens River. Could you describe what those
03 initiatives are?

04 A Yes. The DWP is in the process now of setting up
05 the management plans for the three branches in the
06 Upper Owens River so that once these management plans
07 are implemented, the land-use practices that will
08 continue to be practiced there then will have no effect
09 on the Upper Owens River.

10 Q Is the City of Los Angeles considering removing
11 grazing from the area -- areas adjacent to the Upper
12 Owens River?

13 A Those decisions have not been made. In the
14 process of submitting my plans to the department, that
15 could be part of the scenario. It will be a different
16 mix of scenarios because different reaches require
17 different types of land use plans.

18 Q If the City of Los Angeles did decide to remove
19 grazing from riparian areas, would you expect riparian
20 vegetation to emerge as a result?

21 A Yes, I would.

22 Q And how would riparian vegetation emergence affect
23 the width of the channel of the Upper Owens River?

24 A It will narrow the width of the Upper Owens River.

25 Q Let's assume that the import from the Mono Basin

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01 is reduced as a result of this Board's order and let's
02 also assume that grazing is removed from riparian areas
03 at the initiative of the City of Los Angeles, would
04 your estimate of bank-full flow change given those
05 assumptions?

06 A Yes. It will change over time, but it would not
07 change in the beginning.

08 Q Your estimate would change as the channel itself
09 changes?

10 A Yes.

11 Q Do you have an opinion about the specific
12 restoration measures discussed beginning on Page 218 of
13 this report?

14 A I believe that I skimmed this when I was looking
15 at the flow data, but I didn't pay too much attention
16 to it.

17 Q Then I won't ask any further questions. I ask you
18 to assume that these measures are complex and many in
19 number, so I will ask you a different question.

20 On Page 225 --

21 MR. DODGE: Mr. Chairman, let me just say, so that
22 everyone is apprised, that I'm not objecting to
23 Mr. Roos-Collins' questions because I just -- well, for
24 whatever reason, I'm not objecting. But I will, at
25 some point, take the position that rebuttal ought to be

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01 limited to rebuttal and, you know, I think that in
02 fairness, he's going well beyond what Dr. Platts put
03 into evidence as rebuttal.

04 I'm just -- I just want everyone to know that I'm
05 not -- I'm planning to take that position as
06 necessary.

07 MR. BIRMINGHAM: I think what Mr. Dodge is telling
08 us is that when I start to ask questions on redirect
09 about these subjects which Mr. Roos-Collins is going
10 into -- he's not objecting because he and
11 Mr. Roos-Collins are allies, but when I start questions
12 on the same subject, you're going to get objections. I
13 think that's what Mr. Dodge meant.

14 (Laughter.)

15 HEARING OFFICER DEL PIERO: I see other heads
16 nodding vigorously in regard to your analysis,
17 Mr. Birmingham. Obviously, you're correct.

18 Mr. Herrera, how much time has Mr. Roos-Collins
19 had?

20 MR. HERRERA: He has one minute remaining.

21 HEARING OFFICER DEL PIERO: Make good use of it,
22 Mr. Roos-Collins.

23 Q BY MR. ROOS-COLLINS: Dr. Platts, let's turn to
24 Tennant as a method for determining fish flow. Are you
25 recommending that this Board use Tennant and not IFIM?

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01 A BY DR. PLATTS: No, I'm not.

02 Q Are you making any recommendation to this Board
03 regarding the method it uses for determining fish flow
04 in this proceeding?

05 A No, I am not.

06 MR. ROOS-COLLINS: No further questions.

07 HEARING OFFICER DEL PIERO: Thank you very much.

08 Ms. Scoonover?
09 MS. SCOONOVER: I have no questions of this panel.
10 HEARING OFFICER DEL PIERO: Thank you very much,
11 Ms. Scoonover.
12 Mr. Frink?
13 MR. FRINK: Yes. I have just a few.
14 CROSS-EXAMINATION BY THE STAFF
15 Q BY MR. FRINK: Dr. Platts, when did you last visit
16 the Upper Owens River?
17 A BY DR. PLATTS: Excuse me. I was trying to figure
18 out where the voice comes from.
19 (Laughter.)
20 Q BY MR. FRINK: It's over here. Here we go. You're
21 going to be dreaming this.
22 HEARING OFFICER DEL PIERO: This is a test,
23 Dr. Platts.
24 MR. CANADAY: My lips didn't move.
25 DR. PLATTS: I was there this last October.
0084
01 Q BY MR. FRINK: Do you know approximately what the
02 flow was on the day that you visited?
03 A BY DR. PLATTS: No. I did not check to see what the
04 flow was.
05 Q And how would you describe the channel conditions
06 in the portion of the Upper Owens River that you
07 visited at that time?
08 A Fairly poor.
09 Q In what way?
10 A The channel was transporting fines. The stream
11 banks were eroded. Some areas of the channel
12 over-widened.
13 Q What portion of the Upper Owens River did you
14 visit?
15 A I visited that area from the lower Arcularius
16 Ranch to Crowley Reservoir.
17 Q In terms of the stream bank erosion that you
18 referred to, what do you believe was the cause of that?
19 A That year's erosion or over the long-term?
20 Q The ongoing erosion. The erosion you saw at the
21 time.
22 A Most of it was due to livestock grazing.
23 MR. FRINK: That's all the questions I have.
24 Thank you.
25 HEARING OFFICER DEL PIERO: Mr. Satkowski?
0085
01 MR. SATKOWSKI: Yes. I just have a couple of
02 questions.
03 Q BY MR. SATKOWSKI: Dr. Platts, earlier Mr. Dodge
04 asked you questions dealing with the Owens River, and I
05 wasn't exactly clear on what you had said. You had
06 responded to a question by saying that having a 200 cfs
07 flow on the Owens River would be okay if you wanted to
08 go back to the original type of system and narrow the
09 channel. Is that correct?
10 A BY DR. PLATTS: I think my statement was that if you
11 had a 200 cfs flow that was uniform over the year --
12 was that your statement that you understood? A 200 cfs
13 flow over the year that the channel would change?
14 Q Yes. Go ahead.
15 A Yes. The channel would change if it had a uniform

16 200 cfs flow.

17 Q You also said something about a 300 cfs flow might
18 be something that we might want to look at, at least
19 for an initial period of time, something to that
20 effect. Could you elaborate on what you meant by that?

21 A Yes. I make that statement because I believe that
22 the Upper Owens River needs to go under a series of
23 flows that will rehabilitate the river and in order to
24 bring the stream banks of the Owens up and bring them
25 out and in requires some flows over the top of the bank

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01 that would allow the bank morphology to change.

02 So in the beginning, I would -- I recommend --
03 that's one of the basic main reasons I recommended the
04 300 cfs flow was mainly to rebuild the Owens River --
05 Upper Owens River channel at a faster pace.

06 Q And for what period of time would you recommend
07 that this 300 cfs flow take place?

08 A During a period of the natural hydrograph peak.

09 Q And for, say, how many years into the future
10 before we would be able to decrease the 300 cfs down to
11 some other value?

12 A That would be difficult because I would not want
13 to see any additional water put into the Owens River
14 for the next three to five years that would get to that
15 type of a flow. And then once those flows come in
16 those types of valley bottom types, the process is
17 fairly slow except the Upper Owens does have a fairly
18 high sediment transport rate.

19 I would have to guess that to bring the stream
20 banks back to meet the natural flows with increased
21 vegetation vigor, you're looking at a quarter to a half
22 a decade and maybe even more. Excuse me, a century.

23 Q A quarter to a half a century?

24 A Yes.

25 Q Thank you.

0087

01 Mr. Hasencamp, I understand that you'll be
02 returning to testify on LAAMP, LAASM, water supply, and
03 the L.A. management plan; is that correct?

04 A BY MR. HASENCAMP: Yes, that's correct. I understand
05 the deadline is Thursday at 5:00 p.m. for that
06 testimony?

07 Q That's my understanding. Yes.

08 HEARING OFFICER DEL PIERO: You've trained him
09 well, Mr. Birmingham.

10 Q BY MR. SATKOWSKI: Has L.A. modified its stream-flow
11 and flushing-flow recommendations based on additional
12 evidence?

13 A BY MR. HASENCAMP: Yes. We will, and we will present
14 that in the new plan. But before we presented that, we
15 wanted to run it through the final LAAMP and the L.A.
16 model and look at the results to make sure that they
17 work rather than a micro scale, macro scale of the
18 whole system.

19 Q From what you said, it sounds like you do have the
20 stream-flow and flushing-flow recommendations already
21 developed; is that correct?

22 A Very close to a final draft. I should say a final
23 draft, yes.

24 Q Is it possible that you could provide those to us
25 as soon as possible, either through this hearing or
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01 outside the hearing, so that other parties could use
02 that information and evaluate it using the models?
03 MR. BIRMINGHAM: Excuse me.
04 HEARING OFFICER DEL PIERO: Mr. Birmingham?
05 MR. BIRMINGHAM: I think Mr. Hasencamp testified
06 that the final figures are going to be dependent upon
07 LAAMP, and this testimony is directly related to LAAMP.
08 And it's our understanding that it is due, all of his
09 testimony is due Thursday at five o'clock.
10 We are willing to share with people -- we have
11 been and will continue to be willing to share with
12 people any data we have, but at this point, I'm going
13 to have to ask that it be a reciprocal arrangement, and
14 the other thing is to state that this is not final.
15 Until the LAAMP has been finalized, and we're able to
16 analyze it, the specific flows may change.
17 HEARING OFFICER DEL PIERO: Is there some
18 information Mr. Satkowski has not delivered to you, or
19 are you talking about the other parties?
20 MR. BIRMINGHAM: Not other parties.
21 HEARING OFFICER DEL PIERO: Oh.
22 MR. BIRMINGHAM: No. I'm not complaining about
23 anything Mr. Satkowski has done. All I'm saying is
24 that if we're going to show our testimony, we'd like to
25 see other people's testimony, too. And we're not
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01 trying to be obstreperous, but as I've said a couple of
02 times, we've bent over backwards to try and provide
03 people with data, and we would just appreciate the same
04 courtesy.
05 MR. SATKOWSKI: The reason I was asking for that
06 is, as you know, time is short and if other parties --
07 HEARING OFFICER DEL PIERO: No one knows that
08 better than I, Mr. Satkowski.
09 MR. SATKOWSKI: Yes.
10 -- want to evaluate the L.A. management plan
11 values, I don't know if enough time will be available
12 after we receive the information. So that's why I was
13 recommending that we receive that information as soon
14 as possible if it's available.
15 HEARING OFFICER DEL PIERO: Mr. Birmingham, can I
16 ask you a question? What information are you
17 suggesting is not being provided you in a timely
18 fashion?
19 MR. BIRMINGHAM: I don't want to reopen old
20 arguments, but I still would love to look at various
21 documents we've requested from the Mono Lake
22 Committee. There have been efforts throughout these
23 proceedings for us to get information from the
24 Department of Fish and Game. I will say quite honestly
25 that the Department of Fish and Game has been much more
0090
01 forthcoming in providing data and documents recently
02 than they were at the beginning, but what I'm saying is
03 if we're going to provide our testimony before Thursday
04 to the State Board and the other parties, we'd like the
05 other parties to provide their testimony to us earlier

06 on this subject.

07 HEARING OFFICER DEL PIERO: Mr. Frink?

08 MR. FRINK: Yes. I believe Mr. Satkowski wasn't
09 really interested in the testimony on behalf of the
10 Department of Water and Power, and we realize that
11 you're not in a position to finalize that yet.

12 What he was interested in receiving, if it's
13 available, and with the recognition that the numbers
14 are tentative, would be the tentative-flow
15 recommendations and flushing-flow recommendations that
16 the Department of Water and Power would use in their
17 management plan if the numbers are feasible. I don't
18 know if you're at that stage or not, but if you are, it
19 might be helpful and expedite the hearing later on.

20 HEARING OFFICER DEL PIERO: Mr. Hasencamp, do you
21 know the answer to that question?

22 MR. HASENCAMP: Yes. We can certainly provide
23 draft numbers.

24 I think Mr. Birmingham was also referring to Mono
25 Lake Committee as putting together a management plan as
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01 well for some of their own goals, and I don't know if
02 there's a request also for them to provide their input
03 in the same manner. I think that's part of
04 Mr. Birmingham's objection.

05 HEARING OFFICER DEL PIERO: When do you propose to
06 put that information on, Mr. Dodge?

07 MR. DODGE: What?

08 MR. VORSTER: The management plan?

09 HEARING OFFICER DEL PIERO: Would you like to have
10 the Reporter read the question back, Mr. Dodge?

11 MR. DODGE: How many times have I asked you to get
12 our management plan together, Mr. Vorster?

13 MR. VORSTER: Many times. If I can give my
14 answer, it's similar to what I think I've heard
15 before. Until we have the final LAAMP, the LAAMP does
16 not work at this point to do the management plan --

17 MR. DODGE: It's the same excuse I hear every time
18 I ask him. We don't have it yet.

19 MR. VORSTER: We don't have the model yet so I can
20 run it.

21 MR. BIRMINGHAM: Can I make a motion that we
22 delete the expletive and --

23 HEARING OFFICER DEL PIERO: Sounds like a personal
24 problem to me.

25 Which expletive?

0092

01 MR. BIRMINGHAM: There's a reference --

02 HEARING OFFICER DEL PIERO: Ms. Anglin didn't hear
03 it either. So --

04 MR. DODGE: We have a deadline which is, as I
05 understand it, based on when we expect LAAMP to be
06 amended, and I am sympathetic, but I can't do it
07 either. I'm sympathetic to Mr. Birmingham's thought
08 that he can't beat that deadline.

09 MR. FRINK: If we get the information on Thursday,
10 I think we can work with it. It's not worth stirring
11 everything up at this point.

12 HEARING OFFICER DEL PIERO: We will try our best
13 to persevere. Okay?

14 Now, where were we? Who's on first?
15 MR. SATKOWSKI: Those are all the questions I have
16 at this time.
17 HEARING OFFICER DEL PIERO: Thank you.
18 Mr. Smith?
19 MR. SMITH: Thank you, Mr. Del Piero. I have a
20 couple of questions for Dr. Platts.
21 Q BY MR. SMITH: Despite your explanation a couple of
22 minutes ago about the 300 cfs and the 200 cfs and the
23 Upper Owens, I'm still not capturing exactly what you
24 mean.
25 For the near term, are you saying we should have
0093
01 flows up to 300 cfs in order to build the banks, build
02 the willows? Is that for the near term, like for the
03 first five years? Is that what you're saying?
04 A Yes. I'm saying that we need those type of flows
05 once the Upper Owens is ready for those in order to
06 start the building process.
07 Q How long is this period once the Owens is ready
08 for it? What kind of time period are you talking
09 about?
10 A I'm estimating that it will be three to five years
11 under proper management before the Owens is ready for
12 that type of flow.
13 Q So in the meantime, during this three- to
14 five-year period, what type of flows would you
15 recommend during that period of time, maximum?
16 A I did not look at that.
17 Q Okay. But then after the 300, do you foresee any
18 kind of a period where the flows would then be slowly
19 restricted down to, say, for instance, 200?
20 A Yes. Over a fairly long period of time as the
21 channel rebuilds and the channel bank flows would be
22 less, you're correct.
23 A BY MR. HASENCAMP: And if I could just add, there are
24 wet years when the natural flow in the Upper Owens
25 River is above 200 and, in fact, it was 227 in June of
0094
01 '83. So you could never limit more than, obviously,
02 the natural flow in the creek.
03 Q Right. I'm just speaking about the ways in which
04 we could artificially augment it only. I was not
05 talking about natural flow. Okay. Fine. Thank you
06 for that clarification.
07 I have one other request from you, though. You
08 stated that you saw some aerial photographs of the
09 deterioration of the Upper Owens taken in the twenties
10 or the thirties. I'd like request that the department
11 provide the Board with those photographs.
12 A BY DR. PLATTS: These were on-ground photographs.
13 Q Whatever kind of photographs they were, I would
14 like to have them.
15 HEARING OFFICER DEL PIERO: Mr. Birmingham, do you
16 have those?
17 MR. BIRMINGHAM: I have some photographs that
18 Mr. Tillemans gave me a few moments ago. I believe
19 they're some of those that Dr. Platts referred to in
20 his testimony, and I had intended on asking
21 Mr. Tillemans and Dr. Platts questions on this subject.

22 But I believe they're some of the photographs
23 Dr. Platts referred to, and again --
24 HEARING OFFICER DEL PIERO: Were they on the
25 shelf, too?

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01 MR. BIRMINGHAM: Mr. Del Piero, if we brought in
02 every document that DWP has on the subject, we could
03 fill this room and the building next-door.
04 HEARING OFFICER DEL PIERO: I don't doubt that,
05 Sir.
06 MR. BIRMINGHAM: We have reports, photographs,
07 maps, 90 percent of which I have never seen and 90
08 percent of which probably most of the witnesses have
09 never seen. But we'll provide these photographs to the
10 Board and any other photographs that we have.
11 MR. SMITH: Mr. Birmingham, did you have a
12 catalog, a bibliography of all that material?
13 MR. BIRMINGHAM: We do have a data bank of all of
14 the material that was -- when did we stop compiling
15 it? In 1989, I believe, is when we stopped compiling
16 it. And Ms. Goldsmith tells me it's not all of DWP's.
17 But we do have a data bank of a lot of material that
18 literally would fill that wall.
19 HEARING OFFICER DEL PIERO: Let me ask this
20 question, Mr. Birmingham. Have these photographs been
21 part of any evidentiary exhibits in prior activities?
22 MR. BIRMINGHAM: No.
23 HEARING OFFICER DEL PIERO: They have not?
24 MR. BIRMINGHAM: They have not.
25 HEARING OFFICER DEL PIERO: Has anybody

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01 representing any of the other parties ever seen these
02 before?
03 MR. BIRMINGHAM: Well, California Trout
04 Incorporated has been working with the Department of
05 Water and Power cooperatively over the last few years
06 in developing a management plan that Dr. Platts has
07 referred to. I don't know whether Mr. Edmondson, who
08 is the representative of California Trout, has seen
09 them, but I know that he has been working cooperatively
10 with the department. And maybe Mr. Roos-Collins can
11 address that.
12 HEARING OFFICER DEL PIERO: Let me ask Dr.
13 Platts. Dr. Platts, since you have been working with
14 Mr. Edmondson, do you know if he's seen the pictures
15 you're referring to?
16 DR. PLATTS: I don't know if he's seen the
17 pictures I'm referring to. I know, in talking with
18 Mr. Edmondson, he would answer the question the same
19 way I did. He has the same interpretations.
20 MR. SMITH: As a final request, all of the
21 pictures upon which you relied, could you provide us
22 with copies of those pictures, please?
23 DR. PLATTS: Yes.
24 MR. SMITH: Thank you. That's all I have.
25 HEARING OFFICER DEL PIERO: Mr. Roos-Collins?

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01 MR. ROOS-COLLINS: Several points. First, I hope
02 the record is clear that Dr. Platts was expressing his
03 opinion about Mr. Edmondson's opinion. Mr. Edmondson's

04 opinion may be different than Dr. Platts --

05 HEARING OFFICER DEL PIERO: The record is clear,
06 Mr. Roos-Collins.

07 MR. ROOS-COLLINS: Secondly, I agree with
08 Mr. Birmingham that Cal-Trout does work closely with
09 the City of Los Angeles in developing improved
10 management practices for the Upper Owens. I do not
11 know whether Mr. Edmondson has seen these photographs.

12 HEARING OFFICER DEL PIERO: I sensed that because
13 it was my understanding that you were not one of the
14 participants in this cooperative working arrangement
15 between Cal-Trout and the City of Los Angeles.

16 MR. FRINK: Mr. Hearing Officer, I'd like to
17 express the concern that I have as we approach the end
18 of the hearing, as witnesses are appearing on rebuttal
19 and probably will not be back again, that we not
20 augment the hearing record in unnecessary ways and
21 extend the proceeding indefinitely or unnecessarily.
22 I'm not sure how essential this information is on the
23 pre-diversion conditions of the Upper Owens River
24 because I don't believe that anybody is alleging that
25 the reductions in -- well, I won't get into the

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01 reasoning.

02 But in any event, on any requests for additional
03 information, I think we all have to keep in mind that
04 the hearing is approaching a close and many of the
05 witnesses who could testify to the information probably
06 will not be back again.

07 HEARING OFFICER DEL PIERO: Mr. Dodge?

08 MR. DODGE: Mr. Frink was about to say that no one
09 is taking a position that, in fact, he realizes we are
10 taking, which is why he didn't finish the sentence.

11 MR. SMITH: Could I address that?

12 HEARING OFFICER DEL PIERO: No. No.

13 You can have a seat unless you have something to
14 say, Mr. Birmingham.

15 MR. BIRMINGHAM: I thought I was up next.

16 HEARING OFFICER DEL PIERO: I'm sorry. Forgive
17 me.

18 This issue has been discussed enough. I think you
19 are on next, Mr. Birmingham, unless Mr. Herrera and
20 Mr. Canaday had questions. You do? Fine. Gentlemen,
21 please proceed.

22 Q BY MR. HERRERA: Dr. Platts, in your earlier
23 testimony, you made some comments to the effect that
24 you were not a proponent of constant stream flows but,
25 in fact, you were a proponent of, and maybe I've gotten

0099

01 this right or wrong, but mimicking the natural flow
02 regime. Is that correct?

03 A BY DR. PLATTS: That would be true.

04 Q And you recommended that in the Upper Rush Creek
05 area earlier, and you're recommending the same thing
06 for Owens River; is that correct?

07 A I have never worked with flows on Rush Creek, but
08 I did recommend that on the Upper Owens.

09 Q You made a comment yesterday, I believe, that --
10 in reference to the Department of Fish and Game's
11 recommendation of a maximum of 200 cfs on the Upper

12 Owens, and I believe your comment was that it was too
13 low because it was strictly a flow for fish and will
14 not protect fish habitat, just fish for a short period
15 of time. Is that correct?
16 A That's correct.
17 Q Could you tell me why it will not protect fish
18 habitat?
19 A Because the 200 cfs flow would be far below the
20 bank level. Therefore, the banks and the riparian
21 habitats would never see flows and never have the flows
22 to cause the rebuilding of those systems or have the
23 sediments deposited or the vegetative water or the
24 seeding process. You would have no seeding process on
25 those banks in the Upper Owens if you never had bank
0100 forming -- bank-topping flows.
02 Q And further you said that it would not protect
03 fish habitat, just fish for a short period of time. In
04 other words, these flow regimes would just allow for
05 the protection of the fish for a short period of time.
06 I'm a little bit concerned about what "short
07 period of time" is and what you really meant by just
08 protecting fish for a short period of time.
09 A I'm a little hazy on that, too. I have a hard
10 time visualizing the Owens at a constant 200 cfs, but I
11 think eventually over time with the constant 200 cfs,
12 it would go to fit that form of the channel which would
13 be a very uniform channel and not the high diversity
14 fish habitat channel.
15 Q Would you support this same kind of philosophy for
16 Rush and Lee Vining Creek?
17 A The principles that I expressed on the Upper
18 Owens, I would express those same principles for Rush
19 and Lee Vining knowing that they are different streams,
20 and they occupy different land types, they occupy
21 different channel types. Therefore, the principles
22 would apply, but the final recommendations or
23 suggestions may be different.
24 Q Okay. You were present yesterday when, I believe,
25 Mr. Tillemans and Dr. Beschta presented the videotape
0101 of Rush Creek?
02 A Yes, I was.
03 Q Would you depict that flow as being out-of-bank
04 for Rush Creek?
05 A I depict that flow as being out-of-bank on those
06 very lower banks, but not a flow that would be
07 out-of-bank for the upper banks.
08 Q And what was your understanding of the flow at
09 that time?
10 A My understanding of the flow at that time was that
11 it was a flow of the type that we need at this time to
12 enhance the vegetative riparian corridors along the
13 borders of those flows.
14 Q And I believe when Mr. Tillemans responded to my
15 question yesterday the flow was 78 cfs, Am I correct,
16 Mr. Tillemans?
17 A BY MR. TILLEMANS: I think the flows are 79 and 80.
18 MR. HERRERA: Thank you. That concludes my
19 questions. Thank you, Gentlemen.

20 HEARING OFFICER DEL PIERO: Thank you very much,
21 Mr. Herrera.
22 Mr. Canaday?
23 Q BY MR. CANADAY: Dr. Platts, I'm concerned that we're
24 going to get some confusion in expectations by some of
25 the parties. Could you describe what -- when you talk
0102
01 about riparian vegetation on the Upper Owens, the kind
02 of riparian vegetation that you have in mind was there
03 historically?
04 A BY DR. PLATTS: What type of vegetation was
05 historically on the Upper Owens before the entrance of
06 European man? Is that the question?
07 Q That you're attempting to restore.
08 A Attempting to restore. What I would be attempting
09 to restore on the lands that I'm working on is mainly
10 an herbaceous over-story with clustered willow, not a
11 lot of willow, but a clustered willow, and the
12 herbaceous over-story will come first. And what I
13 really want to do on those lands is drive the root
14 systems down to where we get high bank stability and we
15 get the over-cover and the necessary matting so that
16 high flows will not affect those banks, but they will
17 build those banks, and then the flows, at the same
18 time, give us a chance in certain reaches of that river
19 to again have some brushy species. And the only way we
20 can get brushy species is to have the flows that would
21 distribute the seeding process and allow the survival
22 of those seeds as they come down. Otherwise, it would
23 be very difficult to get any brushy species again on
24 the Upper Owens.
25 Q Your understanding of the difference between, say,
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01 Rush Creek and the Upper Owens River is that the
02 expectations of a riparian community that has recently
03 been seen in Rush Creek is not something that you would
04 expect to occur in the Upper Owens; is that correct?
05 A That is correct. They are different streams.
06 They occupy different valley bottoms. They occupy
07 different channel types, therefore they will react
08 differently, and you are correct.
09 Q Dr. Orton, can you explain your definition of
10 over-bank flows? I'm confused that your recommendation
11 of 45 cfs would result in over-bank flows for riparian
12 vegetation, yet from my view of the video we saw
13 yesterday, I wasn't impressed by any real, what I would
14 call, over-bank flows. I need you to define that.
15 A BY DR. ORTON: Yes, Sir. Over-bank flows, as their
16 name implies, would be flows that go over a bank. And
17 identifying the banks -- if you were in Rush Creek at a
18 flow of 19 cfs and you increased flows to above 45, you
19 would start to see those banks over-top. As you
20 increase the flows beyond that, you would then bump
21 into the next terrace, a new bank-flow discharge. It
22 varies throughout the stream. So you'd hit the next
23 terrace and increase the flows.
24 As you increase the flows further, then you go
25 over the next terrace until you start to get into what
0104
01 you might call a flood flow in the sense of, say, a

02 1986 event where the whole valley gets flooded.
03 The intent of my recommendation was to over-top
04 the banks in the immediate vicinity of the stream
05 channel as defined by, say, 19 cfs or, actually,
06 anywhere between 19 cfs on up to about 45 cfs.
07 Q Your understanding of the channel morphology,
08 let's say, of the lower Rush Creek below The Narrows,
09 that 19 cfs was a full-bank discharge. So you're not
10 talking about over-bank flows, you're talking about an
11 artificial bank created by a 19 cfs flow?
12 MR. BIRMINGHAM: I'm going to object on the
13 grounds the question is ambiguous.
14 HEARING OFFICER DEL PIERO: As to?
15 MR. BIRMINGHAM: May I ask that it be reread?
16 HEARING OFFICER DEL PIERO: Certainly.
17 (Whereupon the record was read by the Reporter.)
18 MR. BIRMINGHAM: I don't understand what the
19 question means.
20 HEARING OFFICER DEL PIERO: Dr. Orton?
21 DR. ORTON: I'm having a little bit of a problem
22 with the term "artificial bank."
23 HEARING OFFICER DEL PIERO: Fine. Mr. Canaday,
24 please restate your question. I'm going to overrule
25 your objection, though, because I don't know that -- I
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01 understood the question. But if Dr. Orton doesn't
02 understand it, I'm going to ask Mr. Canaday to restate
03 it.
04 Q BY MR. CANADAY: You saw the video that we viewed
05 yesterday; is that correct?
06 A BY DR. ORTON: That's correct.
07 Q And the channel in which the stream was contained,
08 you saw that, correct?
09 A At a scale of -- yes. From up in the air, yes.
10 Q And that flow, we've heard, is somewhere between
11 '78 to '80 cfs. Is that your understanding?
12 A That's true, yes.
13 Q Did the visual that we saw yesterday include
14 over-bank flow, in your definition?
15 A No. I would say that for the amount of flow that
16 was in the channel, you'd probably have to go up, say,
17 another 15 cfs to over-top those banks that you saw on
18 the video. And that would be my minimum estimate, and
19 I would restrict that estimate to the lower reach,
20 Reaches 4 and 5.
21 HEARING OFFICER DEL PIERO: Dr. Orton, just for my
22 edification, what was the existing flow in the stream
23 in the videotape?
24 DR. ORTON: In the videotape?
25 HEARING OFFICER DEL PIERO: Yes.
0106
01 DR. ORTON: '79 to '80, was my understanding,
02 cfs.
03 Q BY MR. CANADAY: But in your testimony, though, you
04 state that over-bank -- I'm not wearing my glasses
05 today. Can I borrow Dr. Platts'? My eyesight's not
06 bad. My arms are too short.
07 In your testimony you talk about over-bank flows,
08 and are over-bank flows, by your definition, the same
09 as riparian maintenance flows by Dr. Platts'?

10 A BY DR. ORTON: Yes. In fact -- the answer's yes. My
11 explanation is that that is -- I developed those flows
12 in consideration of the functions that those flows --
13 the biological functions that those flows are intended
14 to achieve. In putting that together, I envision Rush
15 Creek at 19 cfs, which I've seen that creek for several
16 years at that flow.

17 I also saw flows increased beyond that. So that
18 if you had -- if you could envision Rush Creek at 19
19 cfs with the riparian vegetation down right to the
20 water's edge and then you increase flows beyond that,
21 you would start to inundate the riparian vegetation
22 that had grown around the edge of that stream since
23 1983 or so. That vegetation would then start to
24 collect fines, organics.

25 If you brought the flow then back down the
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01 organics that had been in the water there would be
02 deposited on the stream, and you could start to develop
03 your riparian corridor adjacent to the channel as the
04 channel is defined by 19 cfs. That would result in a
05 process, in my opinion, of narrowing that channel.

06 Q But the channel that we saw yesterday was a
07 channel that was defined by a 78 cfs flow that had the
08 riparian community that Dr. Beschta was testifying to
09 that was coming up along next to the stream and
10 defining the channels; is that correct?

11 A That is correct and, in fact, that riparian
12 vegetation defining those channels, to my
13 understanding, is doing so because that riparian
14 vegetation is in the water. It's intercepting a flow,
15 creating turbulence, and having that effect.

16 Q At that flow yesterday?

17 A Yes.

18 Q And then you're defining a flow to narrow the
19 channels, but Dr. Beschta, I believe, testified
20 yesterday that the channels were already narrow and
21 were representative of pre-'41 conditions. Do you
22 recall that testimony?

23 A Could you repeat that, please?

24 Q In Dr. Beschta's testimony yesterday, he indicated
25 that the stream widths of the Lower Rush Creek of which

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01 that video was taken is similar to -- equal or similar
02 to the stream widths that were in that stream prior to
03 diversions.

04 A I recall that testimony, yes.

05 Q Do you agree with that or disagree with that?

06 A I would defer to Dr. Beschta's opinion on that.
07 He has far greater skill at interpreting those
08 photographs. I have looked at those same aerial
09 photographs that he has. I'm impressed by his
10 expertise.

11 Q On Lee Vining Creek, in talking about
12 channel-maintenance flows or flushing flows, you
13 advised them that, "Any of these channel-maintenance
14 flows or flushing flows be deferred until the
15 populations of adults in Lee Vining Creek rises to
16 pre-1989 levels." That was your testimony?

17 A I believe so. Yes.

18 Q So, then, to understand how the populations -- to
19 determine if they met that 1989 level, you -- erase
20 that.

21 So for you to make the determination that they --
22 that the fish population had, in fact, achieved these
23 pre-1989 levels, you would, then, support fish
24 population monitoring to make that determination; is
25 that correct?

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01 A That is correct. I would support -- the existing
02 population data would indicate -- I wouldn't start
03 looking for it because I wouldn't expect the population
04 in the near future to return to that level.

05 Q So, then, you would support, for some period of
06 time, fish population monitoring as the scientific way
07 of determining that they ultimately reached those
08 pre-1989 levels; is that correct?

09 A Mr. Canaday, when you say "for some period of
10 time," are you implying that we would begin immediately
11 or do you mean -- I guess I don't understand the
12 question. I'm sorry.

13 Q Well, the question is, you set the basis of your
14 recommendation that the fish population needs to reach
15 the 1989 condition, some level of population, before
16 your recommendation of these flows, these
17 channel-maintenance flows. How would you determine
18 that the population has reached the 1989 conditions?

19 A I would, in approximately three years, begin
20 monitoring. I don't think the population, due to its
21 present demographics, is capable of getting back up
22 there without outside stocking.

23 Q But you wouldn't want -- you wouldn't want to take
24 sampling now?

25 A I don't think you would learn much, no. I would

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01 not.

02 Q Was it your testimony on Rush Creek that you
03 believe that Rush Creek has the capability of
04 supporting a relatively good fishery? Or --

05 A Fishery? Did I -- I'm not sure whether I said
06 "fishery."

07 Q Your testimony -- I'll get to the point. You
08 suggested that the population indices of Rush Creek for
09 the fishery are equal to, and you have in parenthesis,
10 are better than, what is found in the eastern Sierra
11 streams. Do you still agree with that testimony?

12 A And I don't mean to be evasive here. Can you
13 point me to where I say that?

14 Q Page 5 under the topic of Frequency. The second
15 paragraph.

16 A Yes. What I say there is that, in fact, all
17 population indices are equal to what is found in
18 other -- equal to or better than what is found in other
19 eastern Sierra streams. Fishery implies angling. A
20 fish population --

21 Q Okay. A fish population.

22 A Okay. Then with that understanding, could you
23 repeat the question? I'm sorry.

24 Q All population indices of fish on Rush Creek are
25 equal to or better than what is found in eastern Sierra

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01 streams. Do you agree with that?

02 A I do.

03 Q So you would not typify Rush Creek as a
04 low-productivity stream compared to other eastern
05 Sierra streams; is that correct?

06 A That is correct. However, I want to say "other
07 eastern Sierra streams," that would not include, for
08 example, the Owens River. That would include streams
09 that are coming down and draining the watershed.

10 Q One last question, Dr. Orton. You made a
11 statement that in the L.A. DWP plan -- I understand
12 we're going to have a revised plan, but nevertheless,
13 in this revised plan, the development of riparian
14 vegetation, especially in and immediately along the
15 stream is, in fact, still an important goal of the L.A.
16 DWP plan?

17 A That is correct.

18 Q And that --

19 A Well, to the degree that I have an input in that
20 plan, and I don't think I would be disputed in that, I
21 believe that is an important goal, yes.

22 Q So if it was found that 45 cfs was not adequate
23 for certain maintenance flows, in this case riparian
24 maintenance flows, you would encourage adoption of a
25 flow that did meet that goal; is that correct?

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01 A I would have to see that -- I would have to see
02 the details of the recommendation. In some
03 circumstances, I would not support that.

04 Q Well, let's assume that there was a flow necessary
05 greater than 45 cfs. To meet the plan's goal, under
06 that assumption, you would support that flow; is that
07 correct?

08 A Again, my answer is not necessarily.

09 Q And the basis of that?

10 A Because depending on how the flow -- once a flow
11 would be identified to encourage the growth of riparian
12 community, if that flow were implemented poorly, for
13 example, too soon, then it would work at cross purposes
14 to that goal, I think. For example, if a flow -- if a
15 flow of too high a magnitude were released down Rush
16 Creek, I think -- and Dr. Platts or Dr. Beschta could
17 speak to this, I think a potential for scouring or
18 removing present-day vegetation, which is not yet --
19 stem diameters are not yet wide enough to blow them
20 out -- they'd be lost.

21 Q Do you have any idea what flow rate that would be?

22 A Only very roughly. For example, if 200 -- if a
23 1986 event came along and that were released, I think
24 that you'd set the stream back.

25 Q To your recollection, in what kind of frequency

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01 would you expect a 1986 event? Is this a ten-year
02 event, a five-year event, or 100-year event?

03 A I'd say 10- to 25-year event.

04 Q Okay. Mr. Tillemans, just a couple of questions
05 for you, Sir. You collected the Bartole thalweg data.
06 Is there any reason why that data was not collected
07 above The Narrows in any sections or below?

08 A BY MR. TILLEMANS: Yes. Why wasn't there any data
09 collected above The Narrows? Is that what your
10 question is?
11 Q It appears from the data that I'm looking at that
12 the data was collected from below The Narrows to what
13 we call The Ford; is that correct?
14 A Correct.
15 Q Can you explain why that was the only section of
16 the stream that the Bartole thalweg was collected in?
17 A Basically, due to time and, basically, what
18 Dr. Beschta asked me to do was, you know, if you can
19 sneak in the time and get something of this matter
20 done, do it from The Ford to The Narrows.
21 Q So that question's better asked of Dr. Beschta,
22 then?
23 A Yes.
24 MR. CANADAY: Thank you. That's all I have.
25 HEARING OFFICER DEL PIERO: Thank you very much

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01 Mr. Canaday.
02 Mr. Birmingham, how much redirect do you have?
03 MR. BIRMINGHAM: I expect that my redirect will go
04 well beyond 20 minutes, and I'm wondering if we could
05 take a lunch recess now. I think that my redirect
06 examination of my witnesses would be more effective and
07 efficient if I had a little time to prepare it, and
08 I'd ask for that time over the lunch hour.
09 HEARING OFFICER DEL PIERO: Mr. Dodge?
10 MR. DODGE: Well, I would have thought we could
11 finish up before lunch.
12 MR. BIRMINGHAM: I would have thought so, too. We
13 have gone -- as Mr. Dodge correctly pointed out, we
14 went beyond the scope of rebuttal testimony, I think,
15 with respect to just about everyone. And I doubt that
16 I will be able to complete a redirect after three hours
17 of cross-examination within 20 minutes.
18 HEARING OFFICER DEL PIERO: Mr. Dodge?
19 MR. DODGE: Well, my experience is that we're much
20 more likely to move ahead quickly if he asks questions
21 now than if he talks for an hour and a half at lunch.
22 (Laughter.)
23 HEARING OFFICER DEL PIERO: Mr. Roos-Collins?
24 MR. ROOS-COLLINS: I have two comments. First,
25 with respect to cross-examination going beyond the

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01 scope of direct, I note that I took 20 minutes and not
02 more. If Mr. Birmingham will do that in his
03 cross-examination of my witnesses, I will be
04 delighted.
05 Secondly, I am concerned about Mr. Birmingham's
06 representation that he may need more than 20 minutes
07 for his redirect. I suggest that we're on a slippery
08 slope to a longer hearing than you have scheduled, and
09 I request guidance as to the justification necessary
10 for getting more than 20 minutes on redirect.
11 HEARING OFFICER DEL PIERO: I can't very well give
12 guidance like that, Mr. Roos-Collins, until the end of
13 the 20 minutes so I can hear what Mr. Birmingham's
14 justification is.
15 But, Mr. Birmingham, I want you to start

16 questioning now.
17 MR. BIRMINGHAM: Sure.
18 HEARING OFFICER DEL PIERO: Ladies and Gentlemen,
19 we'll break in about 20 minutes.
20 DR. ORTON: Excuse me, Gentlemen. I don't mean to
21 speak out of order. Can I be excused for about a
22 minute?
23 HEARING OFFICER DEL PIERO: Yes, go ahead.
24 Mr. Birmingham, why don't you begin?
25 MR. BIRMINGHAM: Thank you. Before I do, may I

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01 ask Mr. Roos-Collins for a copy of Cal-Trout Exhibit
02 5-P, which is a photograph? My copy of the photograph
03 is a black-and-white Xerox which is not very good.
04 HEARING OFFICER DEL PIERO: Ladies and Gentlemen,
05 we'll break at about five after the hour, and we'll
06 return here at 1:15.
07 MR. BIRMINGHAM: Excuse me. May I ask if the
08 State Board has an original copy of Cal-Trout Exhibit
09 5-P?
10 HEARING OFFICER DEL PIERO: I don't know.
11 Mr. Smith, do we have an original copy of 5-P?
12 I've seen that picture several times. Is there a
13 reason why we need it?
14 MR. BIRMINGHAM: I would like to ask a question of
15 Dr. Orton of 5-P.
16 HEARING OFFICER DEL PIERO: Is that the picture of
17 Rush Creek?
18 MR. BIRMINGHAM: It's the picture of Rush Creek
19 with the fisherman standing at a meander. And it's an
20 exhibit to the testimony of Eldon Vestal.
21 Actually, Mr. Herrera has discovered it.
22 HEARING OFFICER DEL PIERO: Thank you,
23 Mr. Herrera.
24 MR. BIRMINGHAM: Thank you, Mr. Herrera.
25 / / / / /

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01 REDIRECT EXAMINATION BY MR. BIRMINGHAM
02 Q The copy that Mr. Herrera discovered is a copy
03 that apparently was submitted as Figure 1-A by the
04 Department of Water and Power. The reason I wanted to
05 use the Cal-Trout copy was because Mr. Beschta was the
06 first to view this and describe it.
07 Dr. Orton, I'm handing you a copy of an Exhibit
08 5 -- it's Cal-Trout 5-P and DWP Figure 1, L.A. DWP
09 Figure 1-A, an enlargement of Cal-Trout 5-P. Do you --
10 have you seen this photograph before?
11 A BY DR. ORTON: Yes, I believe so.
12 Q Now, I'm referring to the testimony of Eldon
13 Vestal, which is Cal-Trout Exhibit 5 -- have you read
14 Mr. Vestal's testimony, Dr. Orton?
15 A Yes, I have.
16 Q Now, let me read to you a description -- this is
17 Paragraph 36 of that photograph. "Attached hereto as
18 Cal-Trout 5-P is a photograph I took of an angler
19 fishing on Rush Creek as it existed in 1947 with dense
20 riparian cover, beautiful gravels, and a nice flow of
21 approximately 20 cfs. This photograph is
22 representative of the conditions on Rush Creek before
23 L.A.'s diversions began to have a serious impact."

24 Now, apparently the flow that is depicted in that
25 photograph is approximately 20 cfs. If there were a
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01 flow of 45 cfs in that channel, do you have an opinion
02 as to whether or not the flow of 45 cfs would go out of
03 bank?
04 A I have an opinion, yes.
05 Q What is your opinion?
06 A Three observations, first off --
07 HEARING OFFICER DEL PIERO: Excuse me. Before you
08 begin, can I ask you a question? I just want one
09 clarification. Is it your opinion that it's a 20 cfs
10 flow in that picture?
11 DR. ORTON: It's hard to tell because the depth --
12 HEARING OFFICER DEL PIERO: I understand. Given
13 what you can see, does it appear to you that that's a
14 20 cfs flow?
15 DR. ORTON: It could be.
16 HEARING OFFICER DEL PIERO: Would you be fishing
17 in that stream if it were a 20 cfs flow with that
18 width?
19 DR. ORTON: Would I be fishing? Yeah. I guess I
20 could. I point out on the photograph, Sir, that the
21 angler standing on the bank is in water up to about his
22 knees. He's casting to the bank --
23 HEARING OFFICER DEL PIERO: I understand that.
24 That's why I'm asking because I have a general
25 understanding of what 20 cfs running in about two to
0119
01 three feet looks like, and I'm just interested in your
02 opinion as to whether or not that appears to be 20 cfs
03 or greater, regardless of what the representation is,
04 Mr. Birmingham.
05 MR. BIRMINGHAM: It's not my representation. It's
06 the representation of Cal-Trout.
07 DR. ORTON: Yes, I think it could be 20 cfs.
08 HEARING OFFICER DEL PIERO: Could it be more?
09 DR. ORTON: Yes.
10 HEARING OFFICER DEL PIERO: Significantly more?
11 Could it be 40?
12 DR. ORTON: It could be 40.
13 HEARING OFFICER DEL PIERO: Yeah. I'm sorry for
14 interrupting you, Mr. Birmingham.
15 Ms. Anglin -- do you recall the question that
16 Mr. Birmingham asked you, Dr. Orton?
17 DR. ORTON: Yes, I do.
18 HEARING OFFICER DEL PIERO: Why don't you go ahead
19 and answer and if you need any help, I'll have
20 Ms. Anglin read those questions back.
21 DR. ORTON: I believe the question was whether it
22 was my opinion whether or not those banks would over
23 flow if the flows went up to 44 cfs.
24 Q BY MR. BIRMINGHAM: 45.
25 A BY DR. ORTON: 45 cfs. And my response -- I have an
0120
01 opinion, three observations. First off, there is
02 submerged vegetation in the stream. You can see that
03 on the right. There are some stems. There also seem
04 to be some stems in the middle of the stream just off
05 the left at the center of the photograph. Apparently,

06 the stream is over-topping some terrestrial vegetation
07 in the stream, which is kind of an interesting
08 observation, to my mind.

09 The second observation is the bank on the right
10 clearly is two feet, maybe three feet above the
11 stream. It would not over-top that bank. On the left
12 you see a bank which has a very dish-shaped shape, and
13 it's got no vegetation on it and my opinion is that
14 there, the 40 cfs could over-top that bank and probably
15 create a channel that would cut across that point. In
16 fact, it looks like it might have done so.

17 Q Thank you, Dr. Orton.

18 You said that you have observed Rush Creek at 19
19 cfs?

20 A That's correct.

21 Q At the time you observed Rush Creek at 19 cfs,
22 were there portions of the stream with depths that are
23 similar to the depths that appear in the photograph
24 described or identified and in evidence as Cal-Trout
25 Exhibit 5-P?

0121

01 A Yes.

02 Q Dr. Platts, I have some questions of you. Before
03 I do that, let me just ask some questions of
04 Mr. Hasencamp.

05 Mr. Hasencamp, in the development of your
06 management plan, before you established flows, did you
07 consult with experts?

08 A BY MR. HASENCAMP: Yes, I did.

09 Q You didn't pick the minimum flow by yourself, you
10 did that in consultation with fishery biologists?

11 A Yes, that's true.

12 Q In particular, Mr. Hanson and Dr. Hardy?

13 A Yes, I relied on their written testimony.

14 Q And with respect to the flushing flows or the
15 channel-maintenance flows or the riparian-maintenance
16 flows, you consulted with Dr. Orton?

17 A Yes.

18 Q And did you consult with any other individuals
19 developing the criteria that you would use to select
20 those flows?

21 A Yes. Yes, I did.

22 Q Who were they?

23 A Dr. Beschta, some field personnel who are familiar
24 with some of the daily hydrology of the region.

25 Q And so you didn't pull the figures out of the thin

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01 air?

02 A Certainly not. I took all the recommendations of
03 the various experts and took the micro recommendations
04 and put them in a big plan. Because sometimes there
05 are certain resources that are in conflict, and you
06 have to resolve is water going to go into the Upper
07 Owens River or Rush Creek or Lee Vining Creek, and you
08 can't put it all three places at once. So there's a
09 lot of management of the entire system in developing
10 the management plan.

11 Q Did you consider the flushing flows that had been
12 established by the court based on the recommendations
13 of witnesses who testified before Judge Finney?

14 A I'm a little unclear.
15 Q Well, the interim stream flow order contains
16 flushing flows; is that correct?
17 A Yes, it does.
18 Q Did you consider the flows that had been
19 established based upon the recommendations of experts
20 in that case when you were establishing your flushing
21 flows?
22 A Yes. I took those recommendations into account
23 and the data.
24 Q Dr. Platts, with respect to the Upper Owens River,
25 you stated a couple of times -- and I want to make sure
0123
01 that I understand what you meant. You stated a couple
02 of times that monthly flows mask out what is really
03 going on.
04 A BY DR. PLATTS: Yes, I did.
05 Q How do monthly flows mask out what's really going
06 on?
07 A Well, if you had a zero flow and 100 cfs flow
08 taken during that month, you'd have a monthly flow of
09 50 cfs, and that doesn't show what's going on.
10 Q Is it your understanding that excluding what
11 Mr. Dodge termed "artificial flows" from the Mono
12 Basin, excluding artificial flows from the Mono Basin,
13 is it your understanding that flows in the Upper Owens
14 River sometimes exceed 200 cfs?
15 A They have.
16 Q Do you have any information on that subject,
17 Mr. Hasencamp?
18 A BY MR. HASENCAMP: Yes. As I said before, it was 227
19 cfs in 1983, and the only data -- daily data I looked
20 at was from '73 to more recently. But I assume that
21 probably happened in '69 and '67 and some of the other
22 big years as well.
23 Q Now, Dr. Platts, Mr. Dodge asked you if there was
24 a constant flow -- if the Department of Fish and Game
25 recommended a constant flow from the Mono Craters
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01 Tunnel, would you have an objection to that, and I
02 believe you said no, you wouldn't; is that correct?
03 A BY DR. PLATTS: I would have no objection to that as
04 long as it was within certain boundaries.
05 Q As long as you stay within those certain
06 boundaries, would you have an objection if the flow out
07 of the Mono Craters Tunnel fluctuated?
08 A No, I would not.
09 Q Now, as I understand the department of -- what I
10 understand is not relevant here, so let me ask it
11 differently.
12 Assuming that the Department of Fish and Game
13 recommends that once an export for a year has been
14 established, that that export remain constant, that the
15 flows through the Mono Craters Tunnel remain constant,
16 and assuming that they have established a recommended
17 maximum flow of 200 cfs in the Upper Owens River, are
18 those two recommendations consistent with one another?
19 A BY MR. HASENCAMP: Can I answer the question?
20 Q Certainly, Mr. Hasencamp.
21 A No, they're not. Most of the exports under the

22 flows under DFG proposed recommendations would occur in
23 wet years. And if you were to have a constant export,
24 for example, of 50 cfs and in the month of June, for
25 example, the flow was naturally 180 cfs, you could not

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01 add the 50 cfs, so you could not add a constant flow,
02 and it would top out at 200 cfs. I could draw it on a
03 chart, if you'd like.

04 Q Would you, please?

05 A Certainly.

06 Maybe you have another question.

07 HEARING OFFICER DEL PIERO: Actually, we're going
08 to break. We're going to break. Okay? And you can
09 have that chart prepared so we don't take up additional
10 time after lunch.

11 MR. BIRMINGHAM: I'll have it prepared during
12 lunch.

13 HEARING OFFICER DEL PIERO: And, Ladies and
14 Gentlemen, we'll be back at one -- we're going to be
15 back at 1:15 and before we end, I want to point
16 something out. Okay? I think I'd like to remind all
17 the parties that -- including -- all the parties.
18 Okay? -- that rebuttal testimony is supposed to be --
19 the rebuttal phase of this hearing is supposed to be
20 limited to rebuttal testimony and cross-examination on
21 that testimony. Okay?

22 And it seems to me that -- not to cause anybody
23 any heartburn, but it seems to me it would be
24 appropriate, and I'd appreciate it very much if all of
25 those participants here would focus on that which we

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01 are supposed to be focusing on during the rebuttal
02 phase. Understanding that all of you have a variety of
03 issues you want to address and hoping that I can extend
04 to you every opportunity to do that, it strikes me that
05 now, after a day and a half, this phase of the hearing
06 has not necessarily proceeded in as expeditious or
07 informative a fashion as I would have hoped. So if
08 those of you that are going to be asking questions --
09 all of you that are going to be asking questions can
10 ensure that structure and focus are applied during the
11 course of this rebuttal phase, I would appreciate it.
12 I'm sure the record would be much cleaner, and we won't
13 have requests for clarifications or objections beyond
14 those that we would normally expect. Okay?

15 And I will leave you all with that thought. Have
16 a nice lunch. Ladies and Gentlemen, we'll be back at
17 1:15.

18 (Whereupon the lunch recess was taken.)

19 HEARING OFFICER DEL PIERO: Mr. Birmingham, we're
20 back on the record.

21 MR. BIRMINGHAM: Thank you. I am informed by
22 Mr. Herrera that I have an additional nine minutes of
23 my additional 20, so I will try and move this along.

24 HEARING OFFICER DEL PIERO: Okay.

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25 Q BY MR. BIRMINGHAM: Mr. Hasencamp, before the lunch
01 recess, I asked a question of this panel which you were
02 responding to regarding the consistency between a
03 recommendation that water that flows in the Upper Owens

04 be limited to 200 cfs and the recommendation that
05 exports from the Mono Basin be maintained at a constant
06 level. Do you recall that question?
07 A BY MR. HASENCAMP: Yes, I do.
08 Q And you had given us an answer, and you were going
09 to explain your answer through the presentation of a
10 graph; is that correct?
11 A Yes.
12 Q Over the course of the lunch hour, did you have an
13 opportunity to prepare the graph?
14 A A hurried graph, yes.
15 Q And that's been marked as L.A. DWP Exhibit 141; is
16 that correct?
17 A Yes.
18 Q Would you please explain L.A. DWP Exhibit 141?
19 A Certainly.
20 Q Take the microphone with you if you would,
21 Mr. Hasencamp.
22 A Okay. I chose an actual -- actual data from
23 runoff year 1986. It certainly is not the biggest year
24 on record, but it is one of the more recent wet years.
25 And under most of the plans, especially with the DFG

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01 flows, the only times significant export would occur is
02 in wet years.
03 The bottom line here on the chart shows the actual
04 Upper Owens River flows on a monthly basis in runoff
05 year 1986. The peak occurs in June, which is
06 approximately 164 cfs, and then the base around here is
07 between 90 and 100 cfs for most of the fall and winter.
08 Q That's from the period August through March?
09 A August through March of 1986. Or March of 1987.
10 I'm sorry. April. April '86 through March '87. And
11 there's both the component of the spring component and
12 the runoff component.
13 HEARING OFFICER DEL PIERO: Mr. Hasencamp, I'm
14 glad you clarified that. I thought the font might have
15 been off on this one.
16 Q BY MR. BIRMINGHAM: The runoff year runs from April
17 through March; is that correct?
18 A MR. HASENCAMP: Yes.
19 Q And that's the reason April is the first month on
20 L.A. DWP Exhibit 141?
21 A Yes. Now, in 1986 the runoff for the Mono Basin
22 was about 170,000 acre-feet, which is about 140 percent
23 of normal, and under many of the plans, a runoff of
24 about 40 percent is a reasonable export. It would
25 maintain just about any lake level. In fact, the lake

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01 went up a half a foot in 1986. So if 40 percent of the
02 Mono Basin runoff was allowed to be exported, it would
03 translate into a constant flow of 95 cfs under the
04 Department of Fish and Game recommendations.
05 Now, if you add the 95 cfs --
06 MR. DODGE: Excuse me, Mr. Hasencamp. Do you mean
07 40 percent of 140 percent?
08 MR. HASENCAMP: I mean 40 percent of the 170,000
09 acre-feet, which translates to 68,000 acre-feet.
10 MR. BIRMINGHAM: And I will only note, for the
11 record, that Mr. Dodge has objected many times when I

12 have asked a witness for clarification and has stated,
13 quite accurately, "maybe Mr. Birmingham could do his
14 cross-examination on his own time."

15 MR. DODGE: I apologize.

16 HEARING OFFICER DEL PIERO: You did get that down,
17 didn't you?

18 THE REPORTER: Oh, yes.

19 HEARING OFFICER DEL PIERO: Thank you.

20 MR. HASENCAMP: With the 95 cfs constant export,
21 as proposed by the Department of Fish and Game, if you
22 add 95 cfs to the monthly peak of 164 cfs and, in fact,
23 the daily peak was even higher than that, but on a
24 monthly basis it would translate to about 260 cfs and
25 this, of course, is 60 cfs above the maximum that they

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01 allow, 200 cfs.

02 And, in fact, in this runoff period, all of this
03 export would not be allowed with a 200 cfs cap, and so
04 what you then have is a flow in the Upper Owens of --
05 rising to 200, being constant for a number of months
06 until July or August, and then falling to about 190 or
07 180 constant. So, in effect, you'd have fairly
08 constant flow between 160 and 200 cfs, and you'd lose
09 the peak that you would see in a natural hydrograph,
10 and you also are not allowed to have the constant
11 export of 95. In fact, here, you're only allowed about
12 35 cfs.

13 Q BY MR. BIRMINGHAM: So, Mr. Hasencamp, if I
14 understand L.A. DWP Exhibit 141, using actual runoff
15 data from 1986 and implementing the Department of Fish
16 and Game proposals, it would not be possible to
17 implement a proposal to maintain constant export from
18 the Mono Basin at a continuous level and maintain a
19 maximum flow in the Upper Owens River below 200 cfs?

20 A BY MR. HASENCAMP: Yes. Unless the export was
21 dropped to a very minor amount. But if the export is
22 in the range that we're talking about, you'd be much --
23 you could not do it.

24 Q Dr. Platts. You were asked by Mr. Roos-Collins,
25 and actually, by Ms. Cahill, a number of questions

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01 about the condition of the Upper Owens River before
02 diversions began. And Mr. Smith asked you a question
03 about your use of -- excuse me, Dr. Smith asked you a
04 question about the use of photographs in determining
05 the condition of the Upper Owens River before the
06 Department of Fish and Game began its diversions.

07 I'd like to show you a number of photographs, and
08 may I take a moment and provide them to opposing
09 Counsel first, Mr. Del Piero?

10 HEARING OFFICER DEL PIERO: Mr. Birmingham, I
11 assume these are the photographs?

12 MR. BIRMINGHAM: These are the photographs, yes.

13 HEARING OFFICER DEL PIERO: Dr. Platts, which
14 shelf in the garage did these come off of?

15 (Laughter.)

16 DR. PLATTS: I wasn't looking for paper.

17 (Laughter.)

18 MR. TILLEMANS: I've got to leave.

19 (Laughter.)

20 HEARING OFFICER DEL PIERO: What did we all have
21 for lunch? I want to know.
22 Q BY MR. BIRMINGHAM: Mr. Tillemans, I'm handing you a
23 number of photographs --
24 HEARING OFFICER DEL PIERO: They all missed it,
25 so it's okay.

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01 MR. BIRMINGHAM: I heard it.
02 Q BY MR. BIRMINGHAM: Mr. Tillemans, where did you find
03 those photographs?
04 A BY MR. TILLEMANS: These were --
05 Q Actually, I'd like to withdraw that last
06 question.
07 The photographs I've just handed you,
08 Mr. Tillemans, are those photographs that were in your
09 possession?
10 A Recently, yes.
11 Q Do you know when those photographs were taken?
12 A Prior to Crowley Lake. The exact dates, I'm not
13 sure, but it's somewhere in the thirties. Randall may
14 have a more --
15 Q Dr. Orton, do you know when those photographs were
16 taken?
17 A BY DR. ORTON: Again, I don't know the exact date,
18 but they are 1939, '40, before Crowley Lake.
19 Q Dr. Platts, the photographs I'm handing you, are
20 those photographs on which you relied in support of
21 your opinion concerning the condition of the Upper
22 Owens River channel before diversions began?
23 A BY DR. PLATTS: Yes.
24 MR. BIRMINGHAM: The State Board Staff, made
25 photocopies of these photographs over the lunch hour.

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01 In response to Dr. Smith's request, we would have these
02 marked and then reproduce them so that all of the
03 parties have better quality photographs than those --
04 the Xerox copies or the photocopies.
05 HEARING OFFICER DEL PIERO: Thank you.
06 Q BY MR. BIRMINGHAM: Let me ask you, Dr. Platts,
07 before L.A. began diversions out of the Mono Basin -- I
08 think you testified that the Upper Owens River channel
09 is in a degraded condition; is that correct?
10 A BY DR. PLATTS: That's true.
11 Q What were the causes of the degraded condition of
12 the Upper Owens River channel before DWP began its
13 diversions?
14 A It was primarily due to heavy livestock grazing.
15 Q Do any of the photographs which I've handed you
16 contain evidence of damage due to heavy livestock
17 grazing?
18 A Yes, they do.
19 Q Can you show us an example of that, please?
20 A These two photos --
21 Q Maybe I could write an exhibit number on the back
22 of each one of them. On the first one, I will write
23 L.A. DWP Exhibit 142, and it is a photograph which
24 shows -- actually, would you please describe L.A. DWP
25 142, Dr. Platts?

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01 A This is a photo of the Upper Owens River, and I'm

02 assuming it's in Crowley Lake or above Crowley Lake.
03 And the photograph shows that this river has had a long
04 period of extremely heavy grazing. Stream banks are
05 very poor. A lot of recent shearing by livestock.
06 There's been a change in vegetative composition. The
07 stream is over-widened, and the stream is susceptible
08 to high-flow events because the vegetative condition
09 has extremely low vigor.

10 MR. SMITH: Could you hold that up so we could see
11 that photo?

12 Q BY MR. BIRMINGHAM: That's L.A. DWP 142.

13 I'm now showing you a photograph, Dr. Platts, that
14 has been marked on the back as L.A. DWP 143. It
15 appears to be the portion of a channel taken from a
16 bluff. Is that correct?

17 MR. HERRERA: Excuse me, Mr. Birmingham. Your 20
18 minutes has expired.

19 MR. BIRMINGHAM: I make an application for an
20 additional 20 minutes, Mr. Del Piero.

21 HEARING OFFICER DEL PIERO: The reason for the
22 application?

23 MR. BIRMINGHAM: The showing on which I would base
24 the application is I'm attempting to conduct redirect
25 after approximately three and a half hours of

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01 cross-examination of a panel of four witnesses on
02 testimony, some of which went beyond the scope of the
03 original -- the original direct, and in order to cover
04 that testimony adequately, it's necessary to go beyond
05 the 20 minutes.

06 HEARING OFFICER DEL PIERO: Granted.

07 MR. BIRMINGHAM: Thank you.

08 HEARING OFFICER DEL PIERO: I assume you'll be
09 done within the next 20 minutes?

10 MR. BIRMINGHAM: Yes. We will be done.

11 Q BY MR. BIRMINGHAM: Can you describe that photograph,
12 Dr. Platts?

13 A BY DR. PLATTS: Yes. This is marked 143, and this
14 photograph shows much the same as the other photographs
15 did. The valley bottom has received extremely heavy
16 grazing because that's where the forage is being
17 produced. The stream is showing that it has come
18 apart. The river is not doing well at all. There was
19 willow here, and it looked like there may be a few
20 stragglers. It's pretty well eliminated. The stream
21 banks are very susceptible to any stress. There's been
22 changes in vegetative diversity of the plant
23 community.

24 Q Thank you.

25 Now, Dr. Platts, I'm going to ask you a

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01 hypothetical question. I'm going to ask you to assume
02 that in 1941, that the Upper Owens River was not in a
03 degraded state. Had the Upper Owens River not been in
04 a degraded state in 1941, would exports from the Mono
05 Basin have had the same effects on that channel as they
06 did?

07 A Not the same effects.

08 Q What would the effects have been, in your opinion?

09 A If the Upper Owens River had been a natural system

10 with natural stream banks and natural vegetation, it
11 would have been a river that could have accepted higher
12 flows without so much damage. The high flows still
13 would have changed the channel, but the channel would
14 have been narrower and deeper and the channel would not
15 have been so over-widened in order to take on the
16 excess flows.

17 Q Now, Dr. Platts, again, to make sure that the
18 record is clear on on your opinions. For a period of
19 the next three to five years after implementation of a
20 grazing management plan, is it your opinion that flows
21 in the Upper Owens River should be limited to
22 approximately 200 cfs?

23 A Yes. Before the effects of the plan
24 implementation take effect, I would not want to see
25 high flows on the Upper Owens.

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01 Q During the period of the next three to five years
02 after implementation of a grazing management plan, why
03 would you want to limit flows in the Upper Owens to
04 approximately 200 cfs?

05 A Because at this time, the vegetative condition on
06 the banks is not ready to accept the erosive forces.
07 The vegetation hasn't built to the point that it can
08 accept the sediments and trap those sediments and
09 contain the sediments, and the stream bank is also not
10 tough enough to hold up under those types of flows.

11 Q Now, is it correct that if the stream or channel
12 receives a flow not exceeding 200 cfs or approximately
13 200 cfs for a period of three to five years after
14 implementation of a grazing management plan, that the
15 channel will become more stable?

16 A Would you repeat the question, please?

17 Q Certainly. The process that you just described,
18 when I asked you why you'd want to limit flows for a
19 period of three to five years, is that so that the
20 channel will become more stable?

21 A That's correct. That's to give the vegetation a
22 jump start.

23 Q Now, after the channel has become or had an
24 opportunity to become more stable, is it your
25 recommendation that there be periodic flows of

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01 approximately 300 cfs in the Upper Owens River?

02 A That is correct.

03 Q And how often would you recommend these flows
04 occur after the channel has had an opportunity to
05 become more stable?

06 A If the management plan is followed and if the
07 vegetative response occurs, as I am predicting it would
08 occur, I would want to see our bank maintenance flows
09 occur on the average of about once every three years
10 over a fairly long period of time.

11 Q Now, what would be the purpose of these flows of
12 approximately 300 cfs every three years?

14 so that we can develop a much more productive channel
15 on the Upper Owens than we have today.

17 A Yes. I would like to see a narrower river.

18 Q Now, after the channel has narrowed, as you've
19 described it, in your opinion, should flows in the
20 Upper Owens be limited to 200 cfs?
21 A No. Definitely not.
22 Q Why not?
23 A Well, if you finally rebuild the Owens or get it
24 on the rebuilding process and then decide you're going
25 back to a 200 cfs continuous flow, then you've defeated
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01 the purpose of what we're trying to do.
02 Q What is it that we're trying to do?
03 A We're trying to develop those flows that will keep
04 that stream bank and the channel in good condition and
05 good form from this time on, so we're going to need
06 those type of flows over time.
07 Q Now, after this process has been completed, the
08 restoration that you anticipate based upon the flow
09 regime that you've just described, would exports from
10 the Mono Basin represented by the historic exports
11 damage the Upper Owens River channel?
12 A No, they would not, if they're within certain
13 boundaries.
14 Q Within the boundaries of historic exports, would
15 the channel be damaged?
16 A If I'm interpreting it correctly, we wouldn't be
17 going over flows of 360, 370 cfs? I would say that
18 those flows would be favorable.
19 Q Those flows would not damage the river?
20 A Not once it's toughened up.
21 Q Does your answer depend upon the continuation of a
22 land management program?
23 A Yes. And it has to be followed. It has to be a
24 good land management program in order to get to that
25 type of response.
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01 Q I'd like to talk just a few moments about ramping
02 criteria. Mr. Dodge asked you some questions about
03 this, and I believe he referred to some hydrographs
04 that were in the testimony of Dr. Beschta, the rebuttal
05 testimony.
06 A BY MR. HASENCAMP: I think it was Mr. Hasencamp.
07 Q Excuse me. I believe that Mr. Hasencamp is
08 right.
09 I'd like you to look at the Figure 1 from the
10 rebuttal testimony of William Hasencamp, which is L.A.
11 DWP Exhibit 133. Figure 1 is a hydrograph from Lee
12 Vining Creek above the intake for the period 1981, and
13 before I ask questions of Dr. Platts, Mr. Hasencamp, is
14 it correct that Lee Vining Creek is a creek in which
15 flows are less impaired than the flows of Rush Creek?
16 A Generally, yes.
17 Q Why is that?
18 A Well, there's -- the storage capacity where the
19 bulk of the runoff goes in Lee Vining Creek is much
20 less, and so spills of the reservoirs occur much more
21 frequently, and they're uncontrolled more than Rush
22 Creek.
23 Q So the flows in Lee Vining Creek are more typical
24 of natural flows than flows in Rush Creek?
25 A Yes, they would be.

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01 Q Now, looking at this hydrograph from 1981,
02 Dr. Platts, is it correct that for the period April
03 through July, there are 26 days during which the
04 descending flow was in excess of 10 percent?

05 A BY DR. PLATTS: That sounds about right.

06 Q Now, looking at Lee Vining Creek above the intake
07 in 1986, which is Figure 3 to the testimony of William
08 Hasencamp, is it correct that on the descending limb of
09 the hydrograph represented by Figure 3, that there are
10 16 days in which the descending limb of a hydrograph is
11 in excess of a 10 percent change in the flow?

12 A That's correct.

13 Q Dr. Beschta, in his testimony, talks about the
14 article that we have all submitted as an exhibit. It's
15 an article which you wrote with Dr. Beschta and one of
16 your colleagues, Mark Hill. Is that correct?

17 A That's correct.

18 Q Now, I'd like to refer you, if I can, to the
19 latter part of Dr. Beschta's rebuttal testimony, which
20 is in evidence or has been identified as L.A. DWP
21 Exhibit 137. And in the first paragraph, he refers to
22 the 1991 publication. I'm sorry. Not the first
23 paragraph. This is the first paragraph under the
24 section on ramping flows on Page 14 of his testimony.
25 He refers to your 1991 article. Is that correct,

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01 Dr. Platts?

02 A Yes, he does.

03 Q And then in the next paragraph he says, "Given
04 that both high flows and low flows within the range of
05 natural conditions will occur in a flow-regulated
06 stream, one of the issues that still needs
07 clarification is the rate at which flow changes will
08 occur; i.e., the ramping rate. For recession limbs of
09 stream hydrographs, it is suggested by Hill et al.,
10 that in the absence of supporting research, we
11 recommend that flows be reduced by no more than 10
12 percent of the previous day's flows. And in most
13 cases, a reduction of less than 10 percent of the
14 previous day's flow would be highly preferred."

15 Now, that's what you wrote in 1991; is that
16 correct, Dr. Platts?

17 A That's correct.

18 Q Then he goes on to state that, "The term
19 supporting research is probably too strongly worded for
20 this sentence and does not mean that a recession rate
21 for a given stream should automatically be set at 10
22 percent unless a major scientific research effort is
23 carried out that thoroughly studies various hydrologic
24 aquatic vegetation relationships for that stream.
25 Instead, for streams with long-term records of daily

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01 flows such as Rush Creek above Grant Lake, the
02 historical hydrographs provide abundant information
03 regarding the magnitude and frequency of daily flow
04 changes during both rising and falling stages. In such
05 circumstances, it would seem prudent to simply utilize
06 the existing hydrological record to assess the normal
07 occurrence of flow changes of various magnitudes and

08 use them as guidance for establishing ramping rates.
09 For streams without any hydrologic data, the
10 recommendation of 10 percent may be reasonable or it
11 may not, but it was our recommendation in 1991."

12 I've just read a very large portion of
13 Dr. Beschta's testimony, but do you agree with what
14 Dr. Beschta has stated in that portion of his
15 testimony?

16 A Yes, I agree. If you've got good data, you've got
17 good hydrologic data, good flow regime analysis, that
18 should set your ramping rate criteria. Our guidelines
19 to our profession at that time -- and most of our
20 streams do not have good data, then we put out the
21 conservative 10 percent in order to get protection.

22 Q Now, yesterday I asked you a question, and it was
23 followed up on by a number of my opposing Counsel, and
24 I want to clarify it a little bit further.

25 Is it correct that one of the differences between
0144 01 the Upper Owens River on the one hand, and Rush and Lee
02 Vining Creek on the other that the Upper Owens River is
03 a spring-fed stream to a large degree and Rush and Lee
04 Vining Creeks are snow-melt streams?

05 A That would be part of it.

06 Q And therefore, based upon that difference, you
07 would consider different ramping flows in the different
08 streams?

09 A Yes, I would. If the hydrologic data you had gave
10 you the reason to have different ramping flows, I
11 would.

12 HEARING OFFICER DEL PIERO: Excuse me,
13 Mr. Birmingham.

14 Dr. Platts, so I know, what percentage of the
15 Owens River is spring fed as opposed to snow-melt --
16 that question has been asked now by Mr. Birmingham,
17 Ms. Cahill, Mr. Dodge. And I don't have an answer.

18 MR. DODGE: I didn't ask that question.

19 HEARING OFFICER DEL PIERO: Oh, maybe --

20 MR. DODGE: The question is vague. Upper Owens
21 River where?

22 HEARING OFFICER DEL PIERO: Well, I'm asking --
23 if you wish to object, Mr. Dodge.

24 MR. DODGE: I do. I think the answer is different
25 if you're looking at East Portal versus somewhere
0145 01 downstream.

02 HEARING OFFICER DEL PIERO: Why don't you describe
03 for me what percentage is spring-fed as opposed to
04 snow-melt fed above Portal and then below Portal?

05 MR. HASENCAMP: Maybe I can answer that question?

06 HEARING OFFICER DEL PIERO: I don't know. Can you
07 answer the question?

08 MR. HASENCAMP: I think I would be more qualified
09 to answer.

10 HEARING OFFICER DEL PIERO: Let me ask Dr. Platts,
11 first, and then if I'm not satisfied with his answer,
12 I'll try you.

13 DR. PLATTS: Okay. It depends, too, depending on
14 what you're relating this spring flow versus snow-melt
15 flow to, whether it's just the actual flow going down

16 the channel or is it the processes that each one
17 affects.

18 The snow-melt processes have the most effect on
19 the Upper Owens River than the stream --

20 HEARING OFFICER DEL PIERO: I'm talking about just
21 flow. I'm not talking about biological processes that
22 might result or what effect it has on riparian
23 corridors. That's not the question. I just want to
24 isolate just the flow so I can get an answer on that.

25 A number of people have asked that question
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01 including Mr. Birmingham, and I've never heard a
02 number. I've never heard a percentage of even more
03 than 50 percent or smaller than a bread box, so please
04 quantify it for me.

05 DR. PLATTS: I did do a quick calculation on
06 monthly flows below East Portal from 1941 to 1989, and
07 above East Portal, it was flowing 58 cfs in the average
08 month.

09 HEARING OFFICER DEL PIERO: What percentage of
10 that was snow-melt as opposed to -- that's a monthly
11 average.

12 DR. PLATTS: I would guess about 70 to 80 percent
13 was spring-fed.

14 HEARING OFFICER DEL PIERO: 70 to 80 percent is
15 spring-fed?

16 DR. PLATTS: Now, you may have more accurate
17 figures.

18 HEARING OFFICER DEL PIERO: Mr. Hasencamp?

19 MR. HASENCAMP: It depends on the year type, of
20 course. In dry years, it rises very little, and you
21 get almost a constant flow, especially in the recent
22 drought. And then in wet years, you do get some of the
23 upstream components coming, you get a relatively large
24 peak. So I would say dry --

25 HEARING OFFICER DEL PIERO: Wait. Wait. Wait.
0147

01 Wait. Wait. You get an upstream component of what,
02 snow-melt?

03 DR. PLATTS: Yes.

04 HEARING OFFICER DEL PIERO: In dry years, I'm
05 assuming -- maybe I'm wrong, but the stream that feeds
06 the headwaters of the Owens River, I'm assuming, with
07 the exception of perhaps severe drought years or after
08 multiple years of drought, it runs more or less
09 constant. Is that a correct assumption, or is that an
10 incorrect assumption?

11 DR. PLATTS: It's constant, but it decreases in
12 prolonged droughts.

13 HEARING OFFICER DEL PIERO: I don't want to talk
14 about prolonged droughts. I want to talk about average
15 or median, or anything that you can characterize that's
16 not completely unique and unusual. Okay? So let's not
17 talk about 1991. Let's talk about something else.

18 Don't worry, Mr. Birmingham, this is not being
19 discounted from your 20 minutes.

20 MR. BIRMINGHAM: I was turning around because I
21 was trying to decide if I should assume the role of the
22 Hearing Officer and say, "Answer the question."

23 (Laughter.)

24 HEARING OFFICER DEL PIERO: That's okay. I'm more
25 than capable of getting an answer. Really.

0148

01 MR. HASENCAMP: In a ballpark figure, I would say
02 that about 50 cfs is from springs, and on an average,
03 about 10 cfs from snow melt. But the average is very
04 skewed. In wet years, you know, obviously, the base
05 remains more or less the same. In wet years, you'll
06 get a much larger chunk from the average of ten, and
07 the dry years, much less.

08 HEARING OFFICER DEL PIERO: Above The Portal, how
09 many cfs is running in the stream that's attributable
10 to spring water?

11 MR. HASENCAMP: About 50.

12 HEARING OFFICER DEL PIERO: By cfs?

13 MR. HASENCAMP: It's a little bit less right now.

14 HEARING OFFICER DEL PIERO: Average monthly flow?

15 MR. HASENCAMP: Yes.

16 HEARING OFFICER DEL PIERO: Okay. Okay. So I
17 assume then -- no. Is it appropriate, then, to
18 conclude that anything above 50, on average, is
19 attributable to either snow-melt or some other source
20 of water?

21 MR. HASENCAMP: Yeah. Thunderstorm, et cetera.

22 MR. BIRMINGHAM: Thank you very much,
23 Mr. Del Piero.

24 HEARING OFFICER DEL PIERO: He answered the
25 question.

0149

01 Q BY MR. BIRMINGHAM: Mr. Tillemans, you're probably
02 more familiar with the Owens Valley than any other
03 member of this panel, so I'm going to ask you a
04 question about these photographs, L.A. DWP 142 and 143,
05 in hopes of laying additional foundation.

06 Do you know where those photographs were taken?

07 A BY MR. TILLEMANS: Yes, I do.

08 Q Can you please tell us -- first, L.A. DWP 142.
09 Where was that photograph taken?

10 A Okay. Both these photos are taken essentially
11 about the same site. I was there last week and
12 verified it. This -- both these photos are looking
13 from a northwest perspective to kind of a southeasterly
14 perspective, and its looking -- in the area of Upper
15 Crowley Lake, looking towards Latent Springs on the far
16 left corner and you have White Mountain Peak barely in
17 the background and kind of Casa Diablo area in the
18 middle.

19 Q And now with respect to 143, where was that
20 photograph taken?

21 A Excuse me. I just described 143. I'll describe
22 142 now.

23 Q Where was 142 taken?

24 A It's in the same place, down in the riverbed.

25 Q The same area of the Owens Valley?

0150

01 A It's not the Owens Valley, it's Long Valley.

02 Q Excuse me. L.A. DWP 144 is -- would you please
03 describe what's depicted in this photograph?

04 A This is the Crowley Lake area before Crowley Lake
05 was there. It's a picture looking, I think, in a

06 northeasterly perspective towards the Glass Mountains
07 and Alligator Point.
08 MR. DODGE: Can we have a copy of 142?
09 MR. BIRMINGHAM: Mr. Dodge, I'm going to ask for
10 foundational purposes, and then we'll get you copies of
11 them.
12 Q BY MR. BIRMINGHAM: L.A. DWP 145 is another
13 photograph. Will you please tell us where that
14 photograph was taken?
15 A BY MR. TILLEMANS: This photograph was taken from a
16 higher elevation looking down on Crowley. It's in the
17 Hilton Peak/McGee Creek area and what it looks down on
18 is near the dam site and the boat dock and basically,
19 you're looking at all of Crowley, a large portion of
20 Crowley. I think some of McGee Bay is not in this
21 photo.
22 Q Now, that photo was taken before Crowley began to
23 fill?
24 A Yes.
25 Q So when you say you're looking down at Crowley,
0151
01 you're looking at the location of Crowley before
02 Crowley formed?
03 A That's correct.
04 MR. BIRMINGHAM: Mr. Del Piero, I have two
05 photographs, historic photographs of cattle
06 operations. Do we want to have these marked and
07 introduced?
08 MR. CANADAY: Staff has no desire for those,
09 Mr. Del Piero.
10 HEARING OFFICER DEL PIERO: Unless you have some
11 overwhelming desire, I see no reason to.
12 MR. BIRMINGHAM: Actually, Mr. Tillemans does
13 point out that one of the photographs does contain a
14 good view of the Upper Owens River channel, which
15 I'll --
16 MR. TILLEMANS: It shows the upper one-third --
17 MR. BIRMINGHAM: Actually, let me mark it, and
18 I'll ask you what it shows, Mr. Tillemans. Excuse me.
19 I've marked this photograph as L.A. DWP 145. I
20 thought it was a cattle operation, but apparently, it
21 has other significance.
22 What is that significance, Mr. Tillemans?
23 MR. TILLEMANS: This fence line is still here.
24 This photo was taken in the McGee area and on the
25 right-hand side of it would be anywhere from a half to
0152
01 the upper third of McGee Bay.
02 MS. SCOONOVER: Excuse me, Mr. Birmingham. I
03 believe the last photo was marked as 145. The McGee
04 Creek aerial looking down at Crowley --
05 MR. BIRMINGHAM: That's correct. This would be
06 146. Let me mark it and ask you to describe it again.
07 I've remarked this photograph as 146.
08 Would you describe it again?
09 MR. TILLEMANS: This is, again, Long Valley, and
10 this fence line is still there that goes towards the
11 Glass Mountains. On the right-hand side by the willow
12 today, there would be about a third to a half of McGee
13 Bay showing -- of Crowley Lake.

14 Q BY MR. BIRMINGHAM: In that photograph?
15 A BY MR. TILLEMANS: Yes.
16 Q Thank you.
17 A I visited that site, also.
18 Q How often do you visit these sites during the
19 course of a year, Mr. Tillemans? Not for purposes of
20 identifying these photographs, but how often do you go
21 out to these areas?
22 A I'm out on our property quite a bit in many such
23 places.
24 MR. BIRMINGHAM: Again, Mr. Del Piero, we'll have
25 these reproduced over the weekend and supplied to all
0153
01 the parties. I'll give them to Mr. Dodge or
02 Ms. Cahill, assuming they have questions for
03 cross-examination.
04 HEARING OFFICER DEL PIERO: Thank you very much.
05 MR. BIRMINGHAM: And that concludes my redirect.
06 HEARING OFFICER DEL PIERO: Thank you.
07 Ms. Cahill, would you like the opportunity to look
08 at the pictures beforehand?
09 MS. CAHILL: No. I don't think I have questions
10 about the pictures.
11 HEARING OFFICER DEL PIERO: Then perhaps,
12 Mr. Birmingham, you may want to pass those on to
13 Mr. Dodge or Mr. Roos-Collins or Ms. Scoonover.
14 RECROSS EXAMINATION BY MS. CAHILL
15 Q Dr. Orton, let me just ask again. Your 45 cfs
16 figure -- how did you characterize that? That was
17 bank-full or over-bank?
18 A BY DR. ORTON: Over-bank.
19 Q And you based that on the transects from the IFIM
20 study; is that right?
21 A Yes.
22 Q And those were the transects that both Beak and EA
23 used in their studies?
24 A That's my understanding, yes.
25 Q And did you look at the transects as they are
0154
01 presented in the EA report, which is L.A. DWP Exhibit
02 15?
03 A I'm not familiar. Can you identify it?
04 Q It's the EA instream flow analysis for lower Rush
05 Creek. It's L.A. DWP Exhibit 15, and there are
06 cross-sections of the various transects that are
07 contained in that document.
08 A No. I did not rely on that.
09 Q If I were to tell you that that document contains
10 transects that were located below The Narrows,
11 Transects 47, 49 -- well, anyway, beginning with
12 Transect 47, the transects shown were below The
13 Narrows, and if I were to tell you that there were four
14 lines that represented flows of 13 cfs, 19 cfs, 60 cfs,
15 and 100 cfs, would it be possible for a person to take
16 those transects and locate your 45 cfs line
17 approximately midway, slightly higher than midway
18 between the 20 cfs flow and the 60 cfs flow line?
19 A Located with respect to the figure? The stream
20 bank on the figure? I guess I don't understand the
21 question.

22 Q The question is by examining these cross-sections,
23 could one determine where 45 cfs lies in relation to
24 the banks?
25 A Not by the banks. If you refer to the banks in a
0155
01 real sense as opposed to the banks as depicted on the
02 drawing, there is a difference there.
03 Q What is the difference?
04 A Well, the difference is that what you see in front
05 of you is a representation of the banks, and I would
06 need to know, for example, the spacing of the
07 verticals. It's a transect, and you drop verticals
08 down from the transect. So if -- for example, in the
09 line -- it would depend on how well this represents the
10 bank, the actual bank.
11 Q Can you examine those and tell us whether that's a
12 rough approximation of where the bank is? Would that
13 provide useful information for one who wanted to know
14 what a 45 cfs flow would mean in terms of banks below
15 The Narrows?
16 A It would be useful in one -- I'd have to spend
17 some time with it, I'm afraid.
18 Q What -- how did you use the IFIM transects to
19 determine what would be over-bank?
20 A I'm sorry. I was --
21 Q How did you go from the information in the IFIM
22 studies to determining what was over-bank?
23 A By using the PHABSIM output. The weighted usable
24 area versus flow information.
25 Q How does the weighted usable area output tell you
0156
01 where the bank is?
02 A By the -- the transects feed into the PHABSIM
03 model, and the PHABSIM model is sort of your -- if
04 you're thinking in terms of a flow chart, the beginning
05 of the flow chart would be the transect data and the
06 output would be the weighted usable area versus flow.
07 So it's a very integrated measure.
08 If you look at the fry curves, specifically the
09 weighted usable area versus flow curves for fry, you
10 will find a point where the slope changes direction.
11 And that usually indicates that you've identified a
12 point where the channel, the slope of the channel, the
13 bank, itself, has a sharp break to it.
14 Q So you're inferring where the banks are by a
15 change in slope?
16 A Absolutely, yes.
17 Q And is -- but for a person who wanted to get a
18 rough idea of where the banks are, wouldn't these
19 transects give them a relatively good rough idea?
20 A Yes. If you had all of them -- yeah. If you'd go
21 through them, that might be so.
22 Q Thank you. Doctor -- actually, it's not for
23 Dr. Platts.
24 Mr. Hasencamp, this L.A. DWP 141, that was 1986;
25 is that right?
0157
01 A BY MR. HASENCAMP: The actual Upper Owens River was
02 1986, not the Mono Basin export.
03 Q Right. And you said that 1986 was 140 percent of

04 normal runoff; is that right?
05 A For the Mono Basin.
06 Q And you sometimes have a problem with too much
07 water in very wet years; isn't that right?
08 MR. BIRMINGHAM: Objection. It's vague,
09 ambiguous.
10 MS. CAHILL: Isn't it true --
11 HEARING OFFICER DEL PIERO: You're going to
12 withdraw the question?
13 MS. CAHILL: I'll withdraw it.
14 Q BY MS. CAHILL: Isn't it true that Los Angeles has a
15 concern with being forced to take Mono Basin water in
16 some very wet years where your aqueduct is already at
17 capacity?
18 A BY MR. HASENCAMP: Certainly. We are very concerned
19 about that, and that's why 1986 is such a perfect year
20 because, in reality, we exported about 65,000
21 acre-feet, which is almost the same number I put up
22 there. So that's almost exactly --
23 Q And isn't it true that in 1986, you did not export
24 any water in the months of May, June, and July?
25 A That's right. We exported more later.

0158
01 Q And you didn't export any in May, June, and July
02 because you didn't need it in those months or couldn't
03 accommodate it?
04 A We were concerned about capacity. So we put water
05 in Grant Lake, knowing that we could get the water
06 later in the year when the runoff in the Long Valley
07 area declined, and that's different than how we operate
08 in a wet year.
09 Q So, in fact, you weren't deprived of that peak --
10 this is a combination of a hypothetical and a real, but
11 the truth was that in 1986 when the Upper Owens River
12 had its natural high flows, you didn't take any water.
13 MR. BIRMINGHAM: I'm going to object for the exact
14 reasons that Ms. Cahill stated, that in prefacing her
15 question -- the question is ambiguous because she is
16 combining actual operations with a hypothetical
17 question. L.A. DWP 141 deals with Department of Fish
18 and Game's proposed rules for operating, and the
19 purpose of Mr. Hasencamp's testimony was not to
20 describe what actually happened in 1986, but to
21 demonstrate what would happen if the Department of Fish
22 and Game's rules had been implemented.
23 MS. CAHILL: I'm willing to withdraw that
24 question.
25 Q BY MS. CAHILL: Mr. Hasencamp, let me read to you

0159
01 Fish and Game's recommendation. It's found on Page 217
02 of DFG 62. "Given that water is not available for such
03 a release, meaning a constant year-long release of 200
04 cfs just below East Portal, the recommendation to
05 optimize conditions for trout is to release at a
06 constant rate the augmentation from Grant Lake that
07 becomes available over the year starting July 1st as
08 long as," and there are a number of conditions, and the
09 last one is, "Such releases do not cause Upper Owens
10 River flow below East Portal, and then -- " I'm going
11 leave out the Hot Creek part, "To exceed 200 cfs."

12 So does that recommendation prioritize which takes
13 precedence between the constant flow and the do not
14 exceed 200 cfs?
15 A BY MR. HASENCAMP: The way you worded it, it's an
16 inconsistency.
17 Q If it says, "Take at a constant rate unless it
18 would cause the river to go above 200," that isn't
19 inconsistent is it?
20 A No. That wouldn't be then. In that case, then
21 the 200 would --
22 Q And, in fact, when the Upper Owens River's natural
23 flow approaches 200, isn't it true that in most cases,
24 that will be a very wet year in which Los Angeles is
25 not going to want to take large amounts of Mono Basin
0160 water into the Upper Owens River in the months of May,
02 June, and July?
03 A Well, I would not agree. In this year, in fact,
04 in reality, we exported the 265. It just didn't happen
05 in June. It happened later in October and September.
06 So, in fact, that is a serious cap at 200 cfs, and it
07 would impede the operations, both historically and in
08 the future.
09 Q And you took it in what months?
10 A Well, the total flow in the Upper Owens or in the
11 Owens River below East Portal in September and October
12 was about 265.
13 Q In other words, though, the peak caused when you
14 exceeded 200 was not related to the natural peak in the
15 Upper Owens River; is that right?
16 A That's correct.
17 Q So that we are clear, L.A. DWP 141 roughly shows
18 the flows in the Upper Owens River in the bottom line,
19 but it is not an accurate representation of how L.A.
20 DWP, in fact, took its exports that year, even though
21 that was a year prior to any court lake level
22 injunction?
23 A No. The purpose of L.A. DWP Exhibit 141 was to
24 choose an example year with conditions and show the
25 problems with the DFG criteria.
0161
01 MS. CAHILL: Thank you.
02 HEARING OFFICER DEL PIERO: Thank you very much,
03 Ms. Cahill. Mr. Dodge?
04 MR. DODGE: I'm going to set a record for the
05 fewest questions.
06 MR. BIRMINGHAM: I have that record already,
07 Mr. Dodge.
08 HEARING OFFICER DEL PIERO: I'm afraid, Mr. Dodge,
09 it's true. You'd have to stipulate to set that
10 record.
11 RE-CROSS EXAMINATION BY MR. DODGE
12 Q Dr. Platts, would you take a look at one of my
13 favorite documents, Mr. Hasencamp's testimony, in
14 particular, Figure 3 and Figure 4?
15 HEARING OFFICER DEL PIERO: Mr. Hasencamp, I bet
16 you didn't know that was his favorite document.
17 MR. HASENCAMP: I certainly did not, but I'm
18 flattered.
19 HEARING OFFICER DEL PIERO: I'm sure you are.

20 Q BY MR. DODGE: Figure 3 shows Lee Vining Creek daily
21 variations for 1986. Figure 4 shows the same
22 information for Rush Creek for 1986. Do you see that,
23 Sir?
24 A BY DR. PLATTS: I do.
25 Q On the down limb, if that's what we're calling it,
0162
01 in each case would you agree with me, that there are
02 only two days that exceeded 20 percent?
03 A I would.
04 Q And I appreciate I'm not giving you much time to
05 do this, but just looking at the information on Figure
06 3 and Figure 4, would that information suggest to you,
07 if that's all the information you had, that a ramping
08 criterion of 10 percent on the downside was within the
09 range of reason?
10 A It's difficult to make any statement just from
11 this in this short time period, but I would say it may
12 be reasonable. You know, I would want to qualify that
13 with some time to really go into it.
14 Q I understand.
15 Mr. Hasencamp, I have a really good question for
16 you, and I hope you get it right.
17 MR. BIRMINGHAM: Is the Indian Ditch --
18 (Laughter.)
19 MR. DODGE: No. No. I'm waiting on that one.
20 Q BY MR. DODGE: L.A. Department of Water and Power
21 Exhibit 141, which is your handiwork, right?
22 A BY MR. HASENCAMP: Yes.
23 Q I understood the upshot of your testimony to be
24 that there would be a problem based on the Mono Basin
25 exports -- excuse me. Let me start again.
0163
01 I understood that based on the Mono Basin runoff
02 in 1986 which you said was 140 percent of normal; is
03 that right?
04 A Yes, I did.
05 Q And then you added the actual Upper Owens River
06 flows during 1986?
07 A Yes.
08 Q And the upshot of your testimony was that there
09 would be a problem meeting the DFG recommendation of
10 not to exceed 200 cfs in the Upper Owens River, right?
11 A Well, if you wanted a constant flow throughout the
12 year, yes. You could not do that and keep it at 200
13 cfs.
14 Q My question to you is I want you to assume that
15 the DFG limit of 200 cfs in the Upper Owens River is
16 not only a good idea, but it's cast in granite. All
17 right? Assume that can't exceed that. Can you think
18 of an environmentally responsible way to deal with the
19 excess water in the Mono Basin?
20 MR. BIRMINGHAM: I'm going to object on the
21 grounds that it calls for utter speculation --
22 HEARING OFFICER DEL PIERO: I'm sorry. That
23 objection is overruled. He asked simply if he could
24 think of one. He didn't ask him to identify it.
25 MR. HASENCAMP: I probably could think of one.
0164
01 Q BY MR. DODGE: And would one way to deal with that

02 water be to send it down to raise the level of Mono
03 Lake?

04 MR. BIRMINGHAM: I'm going to object on the
05 grounds that it calls for an opinion beyond the
06 expertise of this witness.

07 HEARING OFFICER DEL PIERO: Excuse me,
08 Mr. Birmingham, but it's going to have to be better
09 than that because the expertise of this witness relates
10 to how much water goes down Rush Creek. So --

11 MR. BIRMINGHAM: But the question is --

12 HEARING OFFICER DEL PIERO: The terminus of Rush
13 Creek, I understand, is Mono Lake. At least it has
14 been during most of the course of this hearing.

15 MR. BIRMINGHAM: The question deals with more
16 environmentally sensitive ways to use this water within
17 the Mono Basin. And I'm not sure that Mr. Hasencamp is
18 qualified to express an opinion concerning whether or
19 not putting this water down into Mono Lake would
20 necessarily be environmentally sensitive. Ultimately,
21 that is the question that is presented to this Board
22 for resolution.

23 HEARING OFFICER DEL PIERO: Mr. Dodge?

24 MR. DODGE: I stand by the question.

25 HEARING OFFICER DEL PIERO: I'm going to overrule
0165

01 the objection. I'm going to overrule it, and I
02 would -- Mr. Birmingham, I would recommend that you
03 read the record and particularly the way that the
04 question was framed afterwards because I think the
05 nature of your objection is -- doesn't necessarily jive
06 with the objection -- pardon me, the nature of the
07 question and --

08 MR. BIRMINGHAM: May I ask that the question be
09 reread now so that --

10 HEARING OFFICER DEL PIERO: Certainly.

11 Ms. Anglin, would you be kind enough to read both the
12 first and the second of Mr. Dodge's questions?

13 (Whereupon the record was read by the Reporter.)

14 MR. BIRMINGHAM: I will withdraw my last
15 objection.

16 HEARING OFFICER DEL PIERO: Thank you very much,
17 Mr. Birmingham.

18 MR. BIRMINGHAM: And I will assert a new
19 objection. The question is vague in that it does not
20 define what environmentally responsible is, and it also
21 lacks foundation because there are many elements of
22 putting water down Rush Creek that are not set forth in
23 Mr. Dodge's hypothetical question.

24 MR. DODGE: I took out the environmentally
25 responsible just to move the thing ahead.

0166
01 HEARING OFFICER DEL PIERO: I understand that, and
02 I'm going to overrule the objection because you did
03 remove that from the second question.

04 Mr. Hasencamp, you can answer the question with a
05 yes or no. If you would like to expand on that, you're
06 welcome to, Sir.

07 MR. HASENCAMP: One way is to put water down the
08 creeks into Mono Lake. There are other ways including
09 increasing irrigation, trying to manage Grant Lake

10 storage in such a way that this 200 cfs concrete stone
11 was that you could try to get the water out, but it
12 would severely restrict the export out of the Mono
13 Basin with both the 200 cfs and the constant flows.
14 And I know that there's potentially problems,
15 environmental problems, putting in it Mono Lake if
16 you're concerned about sand Tufa and some of the
17 nesting isles on Paoha Island. There's a lot.
18 Q BY MR. DODGE: If I understand it -- let's not you
19 and I get into a debate about environmentally
20 sensitive. I'll get into that debate with someone
21 else.

22 But as I understand your testimony, assuming that
23 200 cfs is chipped in granite, the Upper Owens River is
24 not to exceed that, one way to deal with the excess
25 water is to send it down the four tributary streams,

0167

01 right?

02 A Yes.

03 Q One way to deal with the water is through
04 irrigation, right?

05 A Some of it, yes.

06 Q Some of it, yes. And one way to deal with the
07 water is to raise the level of Grant Lake, right?

08 A Yes.

09 Q But that has a lot of perils to it, doesn't it?

10 A If it's done without planning. But if you plan
11 properly, you can certainly accomplish it a lot more
12 effectively.

13 Q But in a 140 percent runoff year, there's a limit
14 to how much Grant Lake can accommodate; is that right?

15 A That's correct.

16 Q And the capacity of Grant Lake is 47,500
17 acre-feet, isn't it?

18 A That's very close.

19 MR. DODGE: Thank you. No further questions.

20 HEARING OFFICER DEL PIERO: Thank you very much.

21 Mr. Roos-Collins?

22 You didn't set a record, Mr. Dodge.

23 MR. DODGE: Well, Mr. Hasencamp is --

24 HEARING OFFICER DEL PIERO: Promises, promises.

25 MR. DODGE: -- more clever than I thought. It

0168

01 took a while.

02 HEARING OFFICER DEL PIERO: He's as clever as I
03 thought he was.

04 Mr. Roos-Collins.

05 Ladies and Gentlemen, I may as well tell you --
06 what are we looking for Mr. Roos-Collins?

07 MR. BIRMINGHAM: I have the photographs,

08 Mr. Roos-Collins. Mr. Dodge gave them to me because he
09 said not to let you have them, that you may want to ask
10 questions about them. But I have never followed
11 Mr. Dodge's direction.

12 HEARING OFFICER DEL PIERO: Mr. Roos-Collins, I'd
13 like to point out to you, Sir, that at a quarter to the
14 hour, I'm going to have to take a break because I have
15 to make a phone call. And so I don't mean to interrupt
16 your examination, but you may as well just assume
17 you're going to get six or seven minutes after the

18 break, at least in your initial 20. Okay?
19 MR. ROOS-COLLINS: Thank you for that guidance.
20 HEARING OFFICER DEL PIERO: Certainly.
21 RECROSS EXAMINATION BY MR. ROOS-COLLINS
22 Q Mr. Hasencamp, you were asked several questions by
23 Mr. Birmingham on his redirect examination regarding
24 the people with whom you consulted in preparing the
25 L.A. DWP management plan.

0169
01 Do you recall those questions?
02 A BY MR. HASENCAMP: Yes, I do.
03 Q Let me ask you a related question. What is the
04 fishery objective of the L.A. DWP management plan?
05 A To follow the Court's decision, which in Cal-Trout
06 2, I believe it is to maintain the fish in good
07 condition that are planted or are naturally below the
08 diversion dams.
09 Q Dr. Orton, on Page 2 of your written testimony,
10 you state that you believe that Dr. Hardy's and
11 Mr. Hanson's recommended flows to be capable of
12 maintaining fish in good condition downstream of the
13 Mono Basin diversions of the City of Los Angeles. That
14 is your opinion?
15 A BY DR. ORTON: Yes, I do, and yes, it is.
16 Q Will you turn now to the phrase on Page 5 of your
17 written testimony, "all population indices." In
18 forming your opinion that the recommended flows just
19 described would maintain the fish in good condition,
20 were you referring to particular population indices?
21 A In part, yes.
22 Q Which ones?
23 A Biomass estimates. Abundance. Presence of
24 multiple-year classes. Typical ages. Longevity.
25 Sizes.

0170
01 HEARING OFFICER DEL PIERO: Mr. Dodge, I'm sure
02 that Mr. Pollack will be happy to give you a copy of
03 that work product.
04 MR. POLLACK: I can't stipulate to that,
05 Mr. Del Piero.
06 HEARING OFFICER DEL PIERO: Okay.
07 MR. DODGE: The last comment he wrote down is, "Hi
08 there, Bruce."
09 (Laughter.)
10 MR. POLLACK: That's also incorrect.
11 MR. BIRMINGHAM: I saw it. It wasn't, "Hi there,
12 Bruce."
13 HEARING OFFICER DEL PIERO: It helps my
14 concentration if everyone sort of stays in their own
15 chair.
16 Please proceed, Mr. Roos-Collins.
17 MR. ROOS-COLLINS: During a prior break, Counsel
18 were chatting about the subject of upcoming testimony.
19 I characterize the subject as "discretion."
20 Mr. Birmingham said that Mr. Dodge had none.
21 MR. BIRMINGHAM: And then, Mr. Dodge set out to
22 prove that I was absolutely correct. Let's leave it at
23 that.
24 MR. VALENTINE: Thank you.
25 Q BY MR. ROOS-COLLINS: Dr. Orton, let's return to your

0171

01 answer. One of the population indices you just listed
02 is biomass. What biomass in Rush Creek, in your
03 opinion, would be indicative of a fishery in good
04 condition?

05 A BY DR. ORTON: I could not answer that by itself. I
06 mean, you can't throw a single index out. I'd have to
07 see how it compares with other streams. It's a
08 relative measure.

09 Q You'd give the same answer with respect to
10 abundance?

11 A No. On that one, you could be specific to the
12 degree that taking them by year classes, if the number
13 of young-of-the-year was being produced in sufficient
14 numbers to maintain subsequent year classes, then at a
15 certain point, it wouldn't matter how many of them you
16 have.

17 Q Abundance refers to the number of fish in a
18 stream?

19 A Yes.

20 Q What abundance, in your opinion, is indicative of
21 a fishery in good condition in Rush Creek?

22 A I think it would be the same answer I gave on the
23 first index, biomass. I'll specify it a bit more.
24 Abundance in Rush Creek, for various year classes, has
25 varied quite a bit. It's hard to give a simple answer

0172

01 to that.

02 Q What range of abundance, in your opinion, is
03 indicative of fish in good condition in Rush Creek?

04 A Taking them by different year classes, the
05 young-of-the-year, we've seen numbers of close to a
06 hundred thousand. We've also seen numbers as low as --
07 this is stretching it. My memory at this point,
08 probably about 8,000. So, you know, you're dealing
09 with an order of magnitude for young-of-the-year.

10 And then for each subsequent year class, there's
11 usually about an order of magnitude reduction to the
12 point where in Rush Creek, three-year olds would be on
13 the order of, oh, less than a thousand. Say anywhere
14 from 200 on up to, I believe, 600 three-years olds.
15 Four-year olds, a fraction of that, and five-year olds,
16 to my knowledge, have not been found with the exception
17 of one scale that I've seen. The older they get, the
18 harder they are to read their scales. It's hard to
19 read the scales, and there's not very many of them, so
20 it's hard to get a population estimate at all at that
21 point.

22 Q Let me read more of the paragraph, which is the
23 predicate for this line of questions. Again, this is
24 on Page 5 of your written testimony. "Although the
25 abundance of trout in Rush Creek has fluctuated within

0173

01 the last ten years, primarily, the younger-age classes,
02 these fluctuations are natural and expected. There is
03 no indication that the population is under any risk of
04 extirpation. In fact, all population indices are equal
05 to or better than what is found in other eastern Sierra
06 streams."

07 In your opinion, is the fishery in Rush Creek

08 today in good condition?

09 A Yes.

10 Q And today, the flow regime in Rush Creek is
11 controlled by the stream and lake level orders issued
12 by the El Dorado Superior Court?

13 A In part.

14 Q Is it your understanding that, but for the
15 diversion of 2,000 acre-feet in 1991 for the Upper
16 Owens River IFIM, no diversions have occurred from Rush
17 Creek in the last several years?

18 MR. BIRMINGHAM: Excuse me. I'm going to object
19 to the question on the grounds that it's ambiguous.
20 Mr. Roos-Collins uses the term "diversion." I wonder
21 if he could state it to mean out-of-basin diversions.
22 In fact, there are diversions ongoing in the basin.

23 MR. ROOS-COLLINS: I thank Mr. Birmingham for that
24 clarification, and I accept it.

25 Q BY MR. ROOS-COLLINS: Dr. Orton, do you understand
0174 the question?

02 A BY DR. ORTON: I do. I'm afraid I forgot the time
03 period. For what period of time?

04 Q You've testified that the fishery in Rush Creek,
05 in your opinion is in good condition today?

06 A Yes.

07 Q My question went to the effect of the existing
08 court orders on diversions. But for the diversion,
09 the export of several thousand acre-feet for the Upper
10 Owens River IFIM, is it your understanding that no
11 export from the Mono Basin has occurred in the last
12 several years?

13 A Well, no. If you're talking about from 1989 to
14 the present, I would agree with that.

15 Q Okay. So the fishery is in good condition today
16 and no export but for that IFIM export has occurred
17 since 1989. If exports commenced again, would the
18 fishery remain in good condition?

19 A I think if the export resulted in stream flows
20 that we've seen over the period of record beginning
21 about 1987, I believe that's true. Yes. I think the
22 fish have remained in good condition since they
23 recolonized the stream.

25 compares the fishery in Rush Creek to the fisheries in
0175

02 the fishery in Rush Creek is in good condition as long
03 as its population indices are comparable to those in

05 A If they're comparable to those in other eastern
06 Sierra streams, if you note -- in the statement, it

08 Morhardt. Actually -- yes. Data presented there. The
09 indices as of that moment. Of course, if something

11 volcanism, for example.

12 Q If there were what?

14 active area. The last reported volcanism was about 90
15 years ago.

16 So, in other words, if something happened that
17 lowered the indices across the board, I would expect
18 that.

19 HEARING OFFICER DEL PIERO: Mr. Roos-Collins,
20 we're going to take a break. We'll be on break for
21 about ten minutes, Ladies and Gentlemen.

22 (Whereupon a recess was taken.)

23 HEARING OFFICER DEL PIERO: Ladies and Gentlemen,
24 we're back on the record. Mr. Dodge?

25 MR. DODGE: Yes. Three quick things. One,
0176

01 pursuant to your direction, I have caused to mark as an
02 exhibit the cover page of the Mono Lake Newsletter
03 together with the information on fisheries. It's
04 National Audubon Society and Mono Lake Committee
05 Exhibit 256 and --

06 HEARING OFFICER DEL PIERO: And I've already ruled
07 that into the record.

08 MR. DODGE: -- I would offer it into evidence.

09 HEARING OFFICER DEL PIERO: I think it was already
10 offered and already entered into the record, but
11 nonetheless, it's been done.

12 MR. DODGE: The next witness is Mr. Miller for
13 whom I have no questions, so I'm going to depart.

14 There are at least two procedural matters that I
15 think we ought to discuss. One is, as you know, except
16 for Mr. Vorster, whose testimony is still in limbo, I
17 have only one witness in rebuttal. That's Dr. Stine.
18 He is available Tuesday afternoon or Thursday, and if
19 we could set him now, I would appreciate it.

20 HEARING OFFICER DEL PIERO: He's available Tuesday
21 afternoon. Does he have classes Tuesday morning?

22 MR. DODGE: I don't remember what --

23 HEARING OFFICER DEL PIERO: Is he available all
24 day Thursday?

25 MR. DODGE: All day Thursday, yeah.

0177
01 MR. CANADAY: Dr. Stine has classes Tuesday
02 morning.

03 HEARING OFFICER DEL PIERO: On Tuesday mornings
04 but not on Thursday?

05 Mr. Birmingham? Do you expect to have significant
06 examination of Dr. Stine?

07 MR. BIRMINGHAM: No, I don't. And on this issue
08 of witnesses, I think it would be appropriate to have
09 Dr. Stine appear on Tuesday afternoon because I don't
10 expect a lot of cross-examination of Dr. Stine.

11 HEARING OFFICER DEL PIERO: Okay. I just don't
12 want to have him here on Tuesday afternoon and not get
13 done with him by five o'clock. That's the concern that
14 I've got. So if you feel confident that's not a
15 problem, we'll do him Tuesday afternoon. If not,
16 Thursday.

17 Ms. Scoonover?

18 MS. SCOONOVER: I'm concerned about the order of
19 the witnesses who are going next because it seems to me
20 we have Mr. Miller, Mr. Barnes.

21 MR. BIRMINGHAM: We have additional witnesses.

22 MS. SCOONOVER: And then Department of Fish and
23 Game had a witness lined up. I'm concerned about the

25 HEARING OFFICER DEL PIERO: The overall picture
0178

02 to try and accommodate everyone's schedule and
03 accommodate the witnesses' schedule and make sure

05 testimony before they put on their presentation and
06 examinations, the schedule, at this point, is not

08 inappropriate characterization, but it's not much
09 better than that.

11 Have you thought about that? You have none now.

12 MS. SCOONOVER: We have none now.

14 Mr. Canaday? Who do we have on Tuesday? We have
15 the balance of Mr. Birmingham's witnesses, is that

17 MR. BIRMINGHAM: We have, on Tuesday, Jerry Gewe,
18 who is a water supply panel witness who has to be

20 related to this subject.

21 HEARING OFFICER DEL PIERO: Which city council,

23 MR. BIRMINGHAM: Los Angeles. So we had hoped to
24 call him on Wednesday.

0179

01 Tuesday? Let's figure this out now. Let's assume --

03 ask everyone else.

04 Ms. Cahill, do you anticipate significant

06 MS. CAHILL: No.

07 HEARING OFFICER DEL PIERO: Ms. Scoonover?

09 HEARING OFFICER DEL PIERO: Give me an estimate of
10 time, 20 minutes?

12 Mr. Birmingham.

13 HEARING OFFICER DEL PIERO: That's not helpful.

15 HEARING OFFICER DEL PIERO: That's helpful.

16 Mr. Roos-Collins? There you go. How much time

18 MR. ROOS-COLLINS: Cal-Trout is jointly calling
19 Dr. Stine. I anticipate two minutes on my direct.

21 four, and it took an hour and a half.

22 MR. BIRMINGHAM: Dr. Stine, compared to the panel

24 MR. ROOS-COLLINS: On my direct examination, less
25 than ten minutes.

01 HEARING OFFICER DEL PIERO: Less than ten
02 minutes?

04 HEARING OFFICER DEL PIERO: I'll assume 20.
05 Mr. Dodge? Are you putting him on, also?

06 MR. DODGE: I am putting him on, period.
07 HEARING OFFICER DEL PIERO: And 20 minutes for
08 you?
09 MR. DODGE: I'll ask him to summarize in 20 to 30
10 minutes, yeah.
11 HEARING OFFICER DEL PIERO: How much time for
12 cross?
13 MS. CAHILL: Probably none. Little to none.
14 Let's say five minutes.
15 HEARING OFFICER DEL PIERO: We're at two and a
16 half hours already. When do you expect him to be here
17 on Tuesday? Does he arrive at two?
18 MR. CANADAY: He has stated he would be here at
19 approximately 2:00 p.m.
20 HEARING OFFICER DEL PIERO: That gives --
21 MR. DODGE: I'll get him here as early as I can.
22 HEARING OFFICER DEL PIERO: I understand, but I
23 also understand what his class schedule is. The best
24 he can do by car is to get here by two o'clock. We had
25 that conversation two or three days ago. I'm a little,
0181
01 in fact, I'm a lot concerned that we'll put him on at
02 two. We're already -- the estimates, even being a
03 little conservative, are already two and a half hours.
04 If we go over at all, even considering the break, we're
05 going to be pushing up against five o'clock, and we
06 won't get him done.
07 Pardon me?
08 MR. VORSTER: Wednesday's a terrible day for
09 Dr. Stine.
10 HEARING OFFICER DEL PIERO: I don't think
11 Wednesday's a consideration. Tuesday afternoon or
12 Thursday morning. What would we have Tuesday afternoon
13 if we did not have him here.
14 MR. DODGE: We have two brief Department of Fish
15 and Game witnesses. We have Mr. Hanson. He can be
16 here on Tuesday.
17 HEARING OFFICER DEL PIERO: Mr. Hasencamp?
18 MR. DODGE: Mr. Hasencamp. I could be ready for
19 Mr. Hasencamp on Tuesday.
20 MR. BIRMINGHAM: Ready for Mr. Hasencamp -- we
21 have additional -- Mr. Miller's here this afternoon.
22 We had hoped to get him on and off this afternoon. His
23 testimony shouldn't be terribly long. We have
24 Mr. Barnes, who will be available on Tuesday.
25 Mr. Barnes, I'm not sure what kind of cross-examination
0182
01 parties have for Mr. Barnes. We also have Mr. Hanson,
02 who's been sitting here most of the day waiting. In
03 fact, all day waiting, and I believe he will be
04 available on Tuesday to come back if he arranges some
05 meetings that he was supposed to attend in Los Angeles,
06 but I think he can accommodate us.
07 HEARING OFFICER DEL PIERO: Is that true,
08 Mr. Hanson?
09 MR. HANSON: Well, I've got some meetings in Los
10 Angeles Tuesday and Wednesday. I'd rather be on
11 Thursday or Friday. If that doesn't work out, I'll
12 cancel it.
13 MR. BIRMINGHAM: So there's a pretty full day,

15 Game witnesses for Tuesday.
16 HEARING OFFICER DEL PIERO: Are we going to have

18 MS. CAHILL: We have Mr. Cordone here today. If
19 we don't get to him today, I think he'd be available

21 his schedule to be here Tuesday.
22 MR. BIRMINGHAM: That would make Wednesday a dark

24 Wednesday.
25 MS. CAHILL: It would probably be better to count

01 on Tom Payne on Wednesday.
02 HEARING OFFICER DEL PIERO: Mr. Birmingham, are

04 Dr. Stine?
05 MR. BIRMINGHAM: Without Dr. Stine, it's probably

07 outlined.
08 HEARING OFFICER DEL PIERO: Mr. Dodge?

10 MR. BIRMINGHAM: Thursday would probably be a good
11 day for Dr. Stine. And Mr. Gewe will be here on

13 MR. FRINK: Who do you have on Tuesday again,
14 Mr. Birmingham?

16 and Mr. Hasencamp.
17 MR. FRINK: On the management plan?

19 testimony I gave yesterday.
20 MS. SCOONOVER: What about Mr. Kimmerer and --

22 testimony, so he will not be -- he will be withdrawn.
23 The others are dependent on LAAMP.

25 HEARING OFFICER DEL PIERO: Mr. Roos-Collins, do
0184

02 we have left, Mr. Canaday, after Thursday of next
03 week?

05 HEARING OFFICER DEL PIERO: Three?
06 MR. CANADAY: If you're going to meet your

08 Friday the 21st, Monday the 24th, and Tuesday the 25th.
09 HEARING OFFICER DEL PIERO: How much time are we

11 Beschta and -- well, is it gone, or is that going to
12 take a half a day for Beschta?

14 HEARING OFFICER DEL PIERO: A whole day?
15 MR. DODGE: I would guess.

17 MR. DODGE: They have a lot more to say than this
18 panel and look how long we've taken with these folks.

20 Mr. Dodge an opportunity to prepare was so that he
21 could do an organized and effective cross-examination.

22 I certainly understand that he may need an additional
23 20 minutes, but -- for the two of them, but all day
24 with two witnesses, I think --
25 MR. DODGE: I do believe over the long haul that I
0185
01 have a world's record for being the briefest, so I'm
02 going to finish them in an orderly way.
03 HEARING OFFICER DEL PIERO: Okay. Besides
04 Hardy -- you guys can argue it later on. I'm trying to
05 figure out timing here to make sure that we get this
06 process done. Okay. Whose testifying on LAAMP?
07 Vorster?
08 MR. DODGE: Yes.
09 HEARING OFFICER DEL PIERO: Who else?
10 MR. DODGE: Hasencamp.
11 MR. HASENCAMP: Mike Deas.
12 MR. VORSTER: Russ Brown.
13 HEARING OFFICER DEL PIERO: One day for this?
14 MR. VORSTER: Hutchison?
15 MR. FRINK: Probably one day on the modeling
16 itself, and probably another day on impacts or
17 operations that are directly related to the modeling.
18 HEARING OFFICER DEL PIERO: And they're supposed
19 to be done Thursday afternoon, Mr. Vorster?
20 MR. VORSTER: My understanding is the testimony is
21 due Thursday at 5:00 p.m. And then we have -- that
22 includes not only on LAAMP, but the water supply
23 models. I think there's NHI. I think that's what you
24 were referring to.
25 MR. FRINK: Correct.
0186
01 MR. VORSTER: I assume that would take a day in
02 addition to the modeling and operational plans.
03 HEARING OFFICER DEL PIERO: Is everybody going to
04 be prepared to do that on Friday of next week?
05 MR. VORSTER: The testimony will be coming in on
06 Thursday at 5:00 p.m.
07 HEARING OFFICER DEL PIERO: I understand that. I
08 also understand the schedule we've got laid out allows
09 us three days after Thursday of next week; Friday,
10 Monday, and Friday, and Monday's already taken up with
11 Drs. Beschta and Hardy, so that means we've got two
12 days. We've got Friday next week, less than 24 hours
13 after the receipt of the testimony, and the following
14 Friday. Everybody going to be ready?
15 MR. BIRMINGHAM: I --
16 HEARING OFFICER DEL PIERO: I don't see anybody
17 jumping up very quickly.
18 MR. BIRMINGHAM: I suspect that we will suffer
19 from the same disability that Mr. Dodge complained
20 about yesterday. I don't know what Mr. Vorster's
21 testimony's going to look like nor do I know what the
22 other LAAMP testimony is going to look like, but I'm
23 sure it's going to be complex.
24 HEARING OFFICER DEL PIERO: We've got to do
25 scheduling. We've got a problem. I'm not going to be
0187
01 able to go to Monterey. It's just that simple. If I
02 do go, it's going to be one-day turnaround. It's just
03 not going to work out.

05 extreme case on which we ought to consider a Saturday?

06 HEARING OFFICER DEL PIERO: I don't know, Ladies

08 try and get this done, but given what's going on,

09 there's no purpose in going on evenings because

11 problem. The thing that's going to be holding us up

12 is -- I guess we could go in the evening on Tuesday and

14 a lost day. We have nothing at this point that we can

15 put on.

17 put Payne on Wednesday.

18 MR. BIRMINGHAM: We also have Jerry Gewe on

20 MR. CANADAY: Is the Board meeting still scheduled

21 for Wednesday?

23 turnaround, two hours.

24 MR. BIRMINGHAM: We would support having a session

0188

01 Monday. We fully support that idea.

02 MS. CAHILL: What about Beschta and Hardy? I

03 wonder if they could make Saturday?

05 day before yesterday. Okay. Look. We're going to

06 do -- Mr. Birmingham, we're going to do all your

08 MR. BIRMINGHAM: The way that it currently looks

09 is Tuesday we would have Mr. Barnes, Mr. Hanson, and

11 then the two Department of Fish and Game witnesses.

12 Thursday we would have Dr. Stine. And then that --

14 testimony.

15 HEARING OFFICER DEL PIERO: I want to ask a

17 at all of getting the modeling testimony by eight

18 o'clock in the morning on Thursday as opposed to five

20 MR. VORSTER: We're meeting on Monday. Meeting

21 all day Monday and, hopefully, we can bring to a

23 That would be an optimistic outlook.

24 HEARING OFFICER DEL PIERO: The reason I ask that

0189

01 day would be Thursday, particularly if we could get the

03 do cross-examination on Friday because everyone would

04 have all day Thursday to evaluate it. So, is the

06 MR. DODGE: Why don't we address that question on

07 Tuesday morning after the Monday meeting?

09 MR. VORSTER: There's a lot -- once the model is

10 done, and not only do all the operational plans have to

11 be done, but all that input to the water supply stuff

12 has to be done.

13 HEARING OFFICER DEL PIERO: Mr. Dodge, you be
14 prepared to have Dr. Stine here Tuesday afternoon and,
15 Ladies and Gentlemen, we'll go Tuesday evening. Okay?

16 MR. DODGE: Stine is Tuesday afternoon.

17 HEARING OFFICER DEL PIERO: Tuesday afternoon.
18 We'll finish him up Tuesday evening. We'll put him on
19 after we get done with all of Mr. Birmingham's
20 witnesses.

21 Mr. Birmingham, you want to read those witnesses
22 again that you've got scheduled for Tuesday?

23 MR. BIRMINGHAM: We have Barnes, Hanson, and
24 Hasencamp's cross and, as Ms. Goldsmith points out,
25 that could be shoved back to the panel on Monday with
0190

01 Dr. Beschta.

02 HEARING OFFICER DEL PIERO: Either way.

03 MR. BIRMINGHAM: Tuesday -- or Wednesday, I'm
04 sorry, we would have Gewe, Cordone, and Payne. And
05 then Tuesday night presumably Dr. Stine.

06 HEARING OFFICER DEL PIERO: Late Tuesday
07 afternoon, Tuesday evening, Dr. Stine.

08 MR. BIRMINGHAM: Thursday would be --

09 HEARING OFFICER DEL PIERO: A dark day.

10 MR. BIRMINGHAM: -- a dark day.

11 HEARING OFFICER DEL PIERO: We're just hoping,
12 Dr. Vorster, but -- if you can get -- I think a number
13 of the people who are meeting with you on Monday are in
14 this room and are going to have that information.
15 Given the process, I don't mean to push people, but if
16 it's at all possible for you all to take that day, if
17 the information is obviously available, and review it.

18 MS. CAHILL: It may not be an entirely dark day
19 because the people designated additional responsive
20 experts need to be on Thursday. After having a blank
21 day to fill in.

22 HEARING OFFICER DEL PIERO: It may well work out
23 that way, anyway. Okay?

24 And then -- who's got a real aversion to doing a
25 Saturday session? There was only one hand in the air,
0191

01 Mr. Dodge?

02 MR. VORSTER: My wife --

03 HEARING OFFICER DEL PIERO: You're not a --

04 MR. VORSTER: My wife has an aversion, not me.

05 MR. DODGE: I'm joking. I'll be here on Saturday,
06 if I have to be.

07 HEARING OFFICER DEL PIERO: I don't really relish
08 the idea of a Saturday hearing, but in the event that
09 we are obliged to do that in order to get done in a
10 timely fashion, as I pointed out, a number of people
11 are going to be leaving around the 1st of February. I
12 am prepared to miss some of those, if not all of those,
13 days in Monterey that I'm scheduled to be there to get
14 this matter wrapped up by the end of the month.

15 Inasmuch as there are 36 people showing up there for
16 three days and they all scheduled it around my
17 schedule, it's going to be a tad embarrassing, so I'm
18 going to try and do what I can do, and if you all can
19 be accommodating as best you can, I understand all

21 get it finished up by the end of the month.

22 MR. DODGE: The other procedural matter, and I

24 to address is that I understand that Mr. Satkowski is
25 putting the arm on us to outline management plans in

01 some way or another by Monday, and I want to know
02 exactly what my obligations are in that regard.

04 now afforded the opportunity to put the arm on in
05 public.

07 Monday would be at least an idea as to what types of
08 standards your group is proposing during rebuttal so

10 modified can accommodate and handle any new standards
11 that might arise. If you can get more specific, that

13 MR. DODGE: We will be as specific as we can,
14 given the status of LAAMP. And I understand that Los

16 MR. ROOS-COLLINS: Mr. Satkowski --
17 HEARING OFFICER DEL PIERO: Wait. Wait. Wait,

19 but it was certainly soliciting a response from
20 Mr. Birmingham.

22 Water and Power intends to attend the meeting on Monday
23 prepared to discuss hypothetical flows with the

25 are not cast in granite because they may change based
0193

02 HEARING OFFICER DEL PIERO: We understand that.
03 We understand that completely, and that's clear on the

05 Mr. Roos-Collins?

06 MR. ROOS-COLLINS: So Mr. Satkowski is requesting

08 alternatives?

09 HEARING OFFICER DEL PIERO: Mr. Frink?

11 from my understanding, is the technical representatives
12 of the parties who attend the modeling meeting on

14 reasonable flows in their plans. Now, obviously, if it
15 doesn't work out right in the models or if, for some

17 entirely permissible. It's totally off the record, but
18 it's an effort to make sure that the models, as much as

20 recommendations that they may be asked to evaluate.

21 HEARING OFFICER DEL PIERO: Satisfied,

23 MR. ROOS-COLLINS: Yes.

24 HEARING OFFICER DEL PIERO: Good.

0194

01 a very long drive in front of him. I'm informed by

02 Mr. Roos-Collins he has no questions. May he be
03 excused?

04 HEARING OFFICER DEL PIERO: Mr. Tillemans, have a
05 safe trip.

06 MR. BIRMINGHAM: And Dr. Platts has to catch an
07 airplane, so I wonder if we could resume with his
08 cross-examination.

09 HEARING OFFICER DEL PIERO: Is everyone clear as
10 to which witnesses are going to be on now on Tuesday
11 and Wednesday? So we can put that issue to rest?
12 Everyone's clear so they can be prepared to
13 cross-examine?

14 Mr. Tillemans, our best to your family, have a
15 safe trip Sir.

16 Dr. Platts, Mr. Roos-Collins.

17 MR. ROOS-COLLINS: Mr. Tillemans, I renew my
18 request that you stop at the garage on the way home.

19 Q BY MR. ROOS-COLLINS: Dr. Orton, I have one final
20 question for you, and then I will move on to
21 Dr. Platts.

22 In your opinion, how do the population indices of
23 the fisheries in the eastern Sierra streams referred to
24 on Page 5 of your written rebuttal testimony compare to
25 the corresponding population indices of the fishery in
0195

01 Rush and Lee Vining Creeks before 1941?

02 A BY DR. ORTON: There's no data comparable to the data
03 presented in either Dr. Mark's testimony or the EA
04 reports. Electrofishing wasn't done then, that wasn't
05 done by anybody then. So any numbers would have to be
06 inferential. I guess that is two answers. The first
07 answer is you can't draw a direct comparison. I'm not
08 sure you can make a comparison.

09 Q You said there were two answers. That's your
10 first answer. Do you have a second answer?

11 A How would those numbers compare? I think it would
12 be safe to say that the numbers of young-of-the-year
13 are comparable now to what existed before. That is to
14 say that they were supporting whatever age classes
15 followed. And I don't think it would have been that
16 far out of the range that we've seen in the data
17 collected over the last ten years in Rush Creek.

18 Lee Vining Creek, it's a different beast. Lee
19 Vining Creek, prior to 1940, had a completely different
20 flow regime. It had, when the power plant was
21 operating, irrigation ditches down below were
22 operating, and they are no longer. So it's very
23 difficult to say.

24 Q Dr. Orton, let me make sure I understand your
25 answer. My question was, how do the population indices
0196

01 in the eastern Sierra streams referred to on Page 5 of
02 your testimony compare with the corresponding
03 population indices in Rush and Lee Vining Creeks prior
04 to 1941? Did you answer that question?

05 A I thought I had.

06 Q Thank you.

07 Dr. Platts, let me move on to you in the interest
08 of your catching your flight.

09 In your redirect examination by Mr. Birmingham,

11 River had come apart before 1941. Was that your
12 testimony?

14 Q Is that a technical term?

15 A No.

17 A What I mean by that, "coming apart" is a phrase to
18 throw the whole mix in that has happened to the Owens

20 follow at the elevation of the following banks. The
21 banks are -- have a lot of sheer damage. You can see

23 level. The plant species composition has changed. So
24 the river is just not in its natural condition.

0197

01 the middle foreground, there appears to be an undercut

03 A Yes. I can't tell whether it's undercut, but I
04 think I see the bank you're referring to.

06 A To a very small degree.

07 Q Has the Upper Owens River come apart at that

09 closest to the viewer in L.A. photograph --

10 HEARING OFFICER DEL PIERO: Mr. Roos-Collins,

12 on the picture so there's no ambiguity in terms of what
13 you're asking?

15 the bend approximately one inch from the lower edge of
16 the photograph.

18 in very poor condition. I can see a lot of slumping of
19 banks, and these banks are now lying down in the

21 of slippage areas where livestock have actually pushed
22 the banks in. It's just not a good bank.

24 morning, I asked you how the pre-1941 fishery in the
25 Upper Owens River compares to the current fishery. I

01 recall that your answer was it was better. Was that
02 your answer?

04 proof of that.

05 Q Do you still have DFG Exhibit 62, the Upper Owens

07 A I do.

08 Q Could you turn to Page 34? The section entitled

10 section. Quote, changes in meander bend configuration,
11 location, and channel length along the Upper Owens

13 channel apparent in aerial photographs taken in 1944
14 and 1990 are presented in Figure 18 and Table 5. The

16 a net loss of 3.6 miles of river channel between 1944
17 and 1990."

18 Do you see that paragraph?
19 A Yes, I do.
20 Q Prior to 1941, had channel grazing caused a loss
21 of river channel in the Upper Owens River?
22 A I would assume that it had.
23 Q And how would that loss compare with the loss of
24 3.6 miles between 1944 and 1990?
25 A I would guess that it would be less.

0199
01 Q Substantially less?
02 MR. BIRMINGHAM: I'm going to object on the
03 grounds that it calls for speculation.
04 MR. ROOS-COLLINS: If that objection represents
05 this witness' knowledge, I accept the objection and
06 withdraw the question.
07 DR. PLATTS: That's a very difficult --
08 HEARING OFFICER DEL PIERO: The question is
09 withdrawn.
10 Q BY MR. ROOS-COLLINS: Dr. Platts, I do understand
11 it's difficult.
12 Let me ask you now about another paragraph in this
13 same exhibit on Page 55. This is in the section where
14 EBASCO presents its analysis of the relationship
15 between flow and sediment movement. First full
16 paragraph on Page 55, quote, based on the sediment
17 transport calculations, flows upstream of Hot Creek in
18 the range of approximately 20 to 200 cfs are optimal
19 for development of coarse bed surface pavement and
20 hence, conditions for gravel improvement."
21 Do you agree with that statement?
22 A BY DR. PLATTS: No, I don't.
23 Q What's the basis for your disagreement?
24 A I think 20 cfs is too low.
25 Q What's the basis for your disagreement?

0200
01 A I doubt if 20 cfs in the Upper Owens River with
02 that type of a channel configuration would move the
03 necessary gravels to create a coarse bed surface.
04 Q Have you reviewed the sediment transport analysis
05 that immediately precedes Page 55?
06 A No, I have not.
07 Q So your disagreement is based on professional
08 judgment?
09 A Yes.
10 Q In answer to questions by Mr. Birmingham on his
11 redirect, I believe you testified that a flow of 200
12 cubic feet per second or more would not damage the
13 Upper Owens River channel once that channel had been
14 toughened. Was that your testimony?
15 A I think it was as long as the flows are in certain
16 boundaries, yes.
17 Q Let's assume that this Board adopts its license
18 amendment before the City of Los Angeles has taken
19 action on the land management initiatives for the Upper
20 Owens River and let's specifically assume that there is
21 no assurance available to this Board that grazing will
22 be removed from the Upper Owens River. In that
23 circumstance, would you still be comfortable that a
24 flow in excess of 200 cubic feet per second would not
25 cause damage in the Upper Owens River?

01 A I would not be comfortable.

02 Q Thank you.

04 recommendations. On Page 1 of your written rebuttal
05 testimony under the section Maintenance Flows, you

07 bank-full flows at least once every three years for
08 channel and bank maintenance."

10 ecological principles discussed in the article to which
11 Mr. Birmingham referred in his redirect examination?

13 principles in that article.

14 Q And do those principles apply as well to Rush and

16 A They could.

17 Q Would you recommend to this Board that this Board

19 maintenance in Rush and Lee Vining Creeks?

20 A I would not at this time because I've never looked

22 would say that I'm not prepared or familiar enough with
23 those streams to make a recommendation to the Board. I

25 Q But based on general ecological principles, you
0202

02 as a general matter?

03 A Yes. That is correct.

05 questions.

06 HEARING OFFICER DEL PIERO: Thank you very much,

08 Mr. Valentine -- is Ms. Scoonover --

09 MR. VALENTINE: She's making some calls, but we

11 HEARING OFFICER DEL PIERO: You have no

12 questions.

14 MR. FRINK: Yes.

15 RECROSS EXAMINATION BY THE STAFF

17 catch. I do have one brief question.

18 You testified earlier that providing occasional

20 HEARING OFFICER DEL PIERO: That's -- excuse me,

21 Mr. Frink. That's one our exhibits, I think, isn't

23 MR. BIRMINGHAM: Yes, L.A. DWP 142.

24 HEARING OFFICER DEL PIERO: Is that ours?

0203

01 copies.

03 Please proceed.

04 Q BY MR. FRINK: Okay. Dr. Platts, you stated earlier

06 approximately 300 cfs on the Upper Owens River would

07 serve to narrow the channel. Could you briefly

08 describe how that process would occur?

09 A BY DR. PLATTS: Yes. And I'd like to refer to them
10 more as stream bank maintenance flows rather than
11 channel.

12 The only way that those stream banks can move in
13 on the Upper Owens is that they receive sediment and
14 they're capable of holding that sediment so they can
15 build. This means that you have to develop the
16 vegetation base and the vegetation mat, and that you
17 have those mats in place at the time the sediments are
18 being moved off of the channel out into the bank and
19 the flood planes.

20 And then vegetation has to catch this, and by
21 catching this, it builds the banks, and it also brings
22 the banks in. See, if you never have flows going up
23 over the bank, like the 200 cfs flow recommended, that
24 means those sediments go all the way to the Crowley
25 Reservoir. We want those sediments to go up on to the

0204

01 banks and form the banks, then that would be the new
02 Owens River banks under the new flow regime on a better
03 vegetative base.

04 Q So the purpose of the flows is that they would
05 deposit sediment above the existing banks?

06 A Yes. That's on the existing banks.

07 MR. FRINK: Okay. That's all I have. Thank you.

08 HEARING OFFICER DEL PIERO: Mr. Satkowski?

09 MR. SATKOWSKI: No questions.

10 HEARING OFFICER DEL PIERO: Mr. Smith?

11 MR. SMITH: Thank you. I have one question for
12 Mr. Hasencamp but not for Dr. Platts.

13 HEARING OFFICER DEL PIERO: Are there any other
14 questions for Dr. Platts? Mr. Canaday, why don't you
15 take the mike and get Dr. Platts on an airplane, okay?

16 Q BY MR. CANADAY: Dr. Platts, you testified that
17 the -- are you the primary person developing the
18 management plan for the L.A. DWP --

19 A BY DR. PLATTS: Yes.

20 Q And you've identified that this is a very long and
21 ongoing process, this recovery; is that correct?

22 A Yes, it will be.

23 Q Do these plans include elements that deal with
24 fish monitoring, channel plan form monitoring, and
25 riparian vegetation monitoring?

0205

01 A They include plans to do the habitat and the
02 stream bank and vegetation monitoring but not the fish
03 monitoring.

04 MR. CANADAY: Thank you.

05 HEARING OFFICER DEL PIERO: Mr. Herrera, any
06 questions?

07 MR. HERRERA: No, I do not, Mr. Del Piero.

08 HEARING OFFICER DEL PIERO: Have a safe trip,
09 Sir.

10 DR. PLATTS: Thank you.

11 HEARING OFFICER DEL PIERO: Thank you very much.
12 Mr. Smith?

13 MR. SMITH: Yes.

14 Q BY MR. SMITH: Mr. Hasencamp, I've got a question for
15 you with some -- feel free to defer this question off

17 Game, but I just wanted to bring it up so that we would
18 have L.A. DWP 141 when your questions come up.

20 Fish and Game is going to cross Mr. Hasencamp further?
21 Then I'm going to ask the question --

23 MR. SMITH: I'm inquiring as to whether you will
24 be further crossing Mr. Hasencamp in these -- this

0206

01 out.

03 Q BY MR. SMITH: I'd like to ask a question now and
04 perhaps it would be a better time to answer it then,

06 On L.A. DWP 141, you have high flows in May and
07 June, and I wanted to quote from DFG 62, Page 216,

09 not the high-flow months of May and June, would
10 increase the monthly average flow by so and so cfs."

12 that clarified. Please?

13 HEARING OFFICER DEL PIERO: Do you understand the

15 MR. HASENCAMP: No.

16 HEARING OFFICER DEL PIERO: I didn't think so. I

18 Q BY MR. SMITH: Okay. In Department of Fish and Game
19 Exhibit No. 62, it's speaking about the further

21 A BY MR. HASENCAMP: You mean the Mono Basin export?

22 Q Yeah. The Mono Basin exports. It concerns your

24 months and DFG is recommending ten months, not the high
25 flow months of May and June.

01 A I see.

02 Q When that issue comes up --

04 question? Are you prepared to respond to that now as
05 to why, rather than waiting for Department of Fish and

07 answer, if he doesn't, he can have the answer ready for
08 you.

10 MR. HASENCAMP: I'm still not sure --

11 HEARING OFFICER DEL PIERO: What the question is?

13 HEARING OFFICER DEL PIERO: I think, Mr. Smith,
14 are you asking him to articulate why their

16 MR. SMITH: Why his understanding of Fish and
17 Game's -- frankly, I'm a little bit confused. This

19 Department of Fish and Game says clearly ten months and
20 not May and June. So I'd like to have this cleared

22 here.

23 MR. HASENCAMP: I'm not sure I do either at this

24 point.
25 MR. SMITH: Take some time to think about it. I'd
0208 like to have an answer, please.
01 HEARING OFFICER DEL PIERO: Mr. Frink?
02 MR. FRINK: Mr. Hasencamp, I think I can clarify
03 what the question is aiming at.
04 In your Exhibit 141, did you assume a flow
05 augmentation over a 12-month period?
06 MR. HASENCAMP: Yes, I did.
07 MR. FRINK: If you had the flow augmentation over
08 a ten-month period and excluded May and June, could you
09 avoid the problem that you discussed earlier on Exhibit
10 141 where flows would exceed 200 cfs?
11 MR. HASENCAMP: No. You could not. I'm not sure
12 exactly how -- what we're talking about. If you're
13 talking about starting in April with a certain flow and
14 then cutting it off in May and June and resuming in
15 July, this 95 cfs then would increase by 12-tenths, so
16 this would be a larger number now since you're not
17 exporting in this time period. And so you would
18 probably be over the 200 for a longer period here.
19 And so you would certainly have a flat hydrograph
20 without any peak, and you would still, by just looking
21 at it, there will be some places where you will be over
22 200 cfs.
23 MR. FRINK: But if you did operate in that way, it
24 would serve to flatten out the flow on the Upper Owens
0209 River?
01 MR. HASENCAMP: Not really. It's impossible to
02 operate that way, from my understanding, because if you
03 have a flow of 95 cfs in April and if the Department of
04 Fish and Game wants to ramp 10 percent, you could not
05 then shut it off in May and June or whatever months.
06 It would be a long process to get back down and get
07 back up -- you certainly would infringe in this point.
08 MR. FRINK: Okay. I believe that answers the
09 question. Thank you.
10 HEARING OFFICER DEL PIERO: I don't know. Does it
11 answer your question?
12 MR. SMITH: Not completely. Let's address it --
13 HEARING OFFICER DEL PIERO: Fine. Maybe you can
14 break it down next week when we have Mr. Hasencamp
15 back.
16 Any other questions of this panel? Mr. Canaday?
17 Mr. Herrera, did you have any questions?
18 MR. HERRERA: No, I do not.
19 HEARING OFFICER DEL PIERO: I didn't think so.
20 Q BY MR. CANADAY: Dr. Orton, I want to go back to the
21 recommendation for over-bank flooding of 45 cfs to make
22 sure I'm clear on what your recommendation is based on.
23 That's based on a theoretical 19 cfs channel or a
24 channel that would contain a 19 cfs flow; is that
0210 correct? And that a -- if 45 cfs were to be put in
01 that channel or if flow was raised to a flow rate, a
02 cue of 45, then you would expect that channel to
03 over-bank.
04 A BY DR. ORTON: Yes in many locations.

07 A Yes.

08 Q Okay. The next question I have is that -- if you

10 want to refer you to the Bartole-thalweg diagram,

11 Figure 2.

13 Q And unfortunately, Mr. Tillemans' not here, but my
14 recollection is that this Bartole-thalweg was collected

16 cfs, I believe.

17 MR. BIRMINGHAM: I believe it was Mr. Tillemans'

19 MR. CANADAY: 79.

20 MR. BIRMINGHAM: That would be a discharge at Mono

22 MR. CANADAY: Thank you.

23 Q BY MR. CANADAY: What would your opinion be based on,

25 existing Bartole-thalweg was measured this last month,
0211

02 was put in that stream, how dramatic would the change
03 be in the thalweg, the depth of the thalweg? Do you

05 A BY DR. ORTON: Over the range of 40 to 80, I would
06 expect to see it dropped. Between 40 going down, I

08 Q In the videotape that we saw yesterday, there was
09 described the pool formation that either had occurred

11 the stream, the stream that's approximately 79 cfs.
12 Would you expect that that natural pool formation would

14 A The scenario that you've described -- yes, I
15 would. But I have to qualify that by saying you'd have

17 all over again.

18 Q Okay. So the pools that we saw in that video

20 flow rate. Okay, at the state of the stream at the
21 time that that video was taken, your testimony is that

23 and those pools that were developed on the margins
24 would no longer be pools or available, and you'd have

0212

01 plan form of the stream, 19 or 20 cfs.

03 makes a difference is the grazing, and if you went
04 back -- at 19 cfs, the stream was definitely responding

06 much as it could because there was grazing on the
07 stream, and every time vegetation would start to grow,

09 yesterday, vegetation was cut back due to grazing.

10 So if the flows were reduced now from 80 down to

12 start to encroach on the stream. As soon as it had
13 encroached on the stream to a significant degree, then

14 you would start to have pools forming again. The
15 process -- would they be of the same depth? I can't
16 answer that.

17 Q But would you agree with me that the pools and the
18 riparian vegetation that is recovering and healing
19 itself along the stream that was identified in the
20 video had a flow rate of 70 cfs, near 80, if that flow
21 rate was now reduced to a flow rate at or near 20 to 30
22 cfs, a continual flow, as we heard from Dr. Hardy, that
23 the healing that's occurring now is going to have to
24 start over again?

25 MR. BIRMINGHAM: I'm going to have to object on
0213

01 the grounds that this goes outside the scope of
02 Dr. Orton's expertise and, in addition, I think it
03 misstates the testimony in that the flows that we have
04 talked about are not the flows strictly -- that we've
05 heard testimony about from DWP witnesses, is not
06 strictly flows of 20 cfs, but it includes flows of -- a
07 minimum flow of 20 cfs plus channel-maintenance flows
08 and over-banking flows and riparian-vegetation flows
09 for the purposes of maintaining pools that have started
10 to form.

11 HEARING OFFICER DEL PIERO: Ms. Anglin, could you
12 read that question back again, please?

13 (Whereupon the record was read by the Reporter.)

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

16 You need to break that question up into three
17 portions, okay?

18 MR. CANADAY: I'll withdraw the question.

19 HEARING OFFICER DEL PIERO: Well, I'm interested
20 in knowing the answer. I'll ask it.

21 MR. CANADAY: I have a degree in biology and not
22 law, Mr. Del Piero.

23 HEARING OFFICER DEL PIERO: Okay. Mr. Frink? You
24 want to help Mr. Canaday?

25 MR. FRINK: I have a degree in law. I'm still not
0214

01 sure I can do this.

02 Dr. Orton, I believe Mr. Canaday asked you a
03 question about the flows in the video and you confirmed
04 that they were approximately '79 to '80 cfs.

05 DR. ORTON: I did, yes.

06 MR. FRINK: And he then asked with the channel
07 having a flow of 19 cfs, 19 to 45 cfs, I believe, is
08 the flow that you have testified or the range of flows
09 you had testified before would not result in
10 over-banking. Is that correct?

11 DR. ORTON: Yes.

12 MR. FRINK: If you were to reduce the flows to
13 that -- the flows in lower Rush Creek to the range of
14 19 to 45 cfs, would the riparian vegetation recovery
15 that is occurring higher up on the bank at a higher
16 flow have to, in essence, begin again at a lower level
17 to accommodate the lower flows?

18 DR. ORTON: Can I ask a question to see if I
19 understand the question?

20 MR. BIRMINGHAM: Excuse me. If Dr. Orton doesn't
21 understand the question, he should say he doesn't

23 rephrased or explained.
24 HEARING OFFICER DEL PIERO: Dr. Orton, what part

0215
01 DR. ORTON: The part of the question that I do not
03 Now --
04 HEARING OFFICER DEL PIERO: Go ahead.

06 would that vegetation die if the flows were reduced, I
07 agree that that is outside of my expertise. If the
09 the bank to a new part of the stream, I think it would,
10 if given time, and that's -- it certainly wouldn't --
12 If it were done carefully -- you don't just drop
13 it down and then you keep it about there, but you drop
15 walk it down, I see no reason why the riparian
16 vegetation wouldn't encroach on the stream, as it were,
18 of 45 or 19 cfs.
19 HEARING OFFICER DEL PIERO: But you don't know
21 level would die or not? Is that a question better put
22 to Dr. Beschta?
24 go so far as to say I don't think it would die.
25 Whether it would continue to do things, that's clearly
01 a question for Dr. Beschta.
02 HEARING OFFICER DEL PIERO: You don't know -- you
04 would have? Or is that something you think
05 Dr. Beschta --
07 that is there are several places, quite some distance
08 from the stream, that riparian vegetation is doing
10 responding in a way that is complex. And I have no
11 information on that.
13 riparian vegetation immediately adjoining the flow of
14 water in the stream, if you were to reduce the flows to
16 involved before you would have the same degree of
17 riparian vegetation immediately adjoining the stream as
19 MR. BIRMINGHAM: I'm going the object on the
20 grounds that the question is beyond the scope of
22 requires expertise in riparian vegetation, and
23 Dr. Orton is a fisheries biologist.
25 flow in excess of 45 cfs for maintenance of riparian
0217
02 recommendation.
03 HEARING OFFICER DEL PIERO: Overruled.

04 Dr. Orton, do you understand the question?
05 DR. ORTON: Yes, I do. I think I can help out.
06 HEARING OFFICER DEL PIERO: Okay.
07 DR. ORTON: My flow recommendation was related to
08 the results of a fisheries study. It talks about the
09 physical process of where water will be. Its effects
10 on riparian vegetation that you're directing the
11 question to has to do with what kind of riparian
12 vegetation would exist ultimately. So at some point, I
13 have to sort of stop talking, as it were, and let
14 someone else start talking about what the end point
15 would be.
16 MR. FRINK: I believe that answers the question.
17 Jim, did you have anything else?
18 HEARING OFFICER DEL PIERO: Mr. Canaday, let me
19 ask you this question. Did that answer what you were
20 looking for?
21 MR. CANADAY: No.
22 HEARING OFFICER DEL PIERO: Okay. Then let me ask
23 this. Did it answer a portion of what you were looking
24 for?
25 MR. CANADAY: A portion.

0218
01 HEARING OFFICER DEL PIERO: Then what portion --
02 explain for me what issue you wish to get to and,
03 perhaps we can get there, okay?
04 MR. CANADAY: I'm trying to understand, we've
05 heard testimony in the video that is showing the stream
06 is repairing itself. By repairing itself, I mean that
07 there is -- at a flow rate of 70 to 80 cfs, we see
08 bank-side riparian vegetation coming in and vegetation
09 coming slightly away from the bank. It's claimed that
10 there are pools being developed in a stream that, we
11 heard testimony in recent times, has not had deep
12 pools.
13 My question to Mr. -- Dr. Orton would be if, in
14 fact, a flow regime was now implemented on that stream
15 at a range between 20 and 30 cfs as a minimum flow,
16 that those pools that are developing at the higher flow
17 no longer will be developing?
18 HEARING OFFICER DEL PIERO: You mean would those
19 pools?
20 MR. CANADAY: Would those pools --
21 HEARING OFFICER DEL PIERO: Dr. Orton, do you
22 understand that question?
23 DR. ORTON: I think so, yes.
24 HEARING OFFICER DEL PIERO: Mr. Birmingham, do you
25 want to object to that question?

0219
01 MR. BIRMINGHAM: I do want to object to the
02 question because it goes beyond the scope of
03 Dr. Orton's expertise. Mr. Canaday is absolutely
04 correct in his characterization of the testimony that
05 he heard yesterday, but Dr. Orton did not present that
06 testimony. That testimony was presented by Dr. Beschta
07 who is an expert on fluvial geomorphology, who has
08 studied riparian vegetation for many, many years and
09 has studied stream restoration for many, many years.
10 The question that Mr. Canaday is posing is a
11 perfectly legitimate question, but ought to be posed to

13 would be Dr. Beschta or, perhaps, Dr. Platts.

14 HEARING OFFICER DEL PIERO: Mr. Frink?

16 relates to what he did in consulting with Mr. Hasencamp
17 in developing the L.A. DWP management plan. We all

19 principles and the mechanics of formation of streams,
20 or at least I hope we all have an understanding after

22 proceeding for a number of months, and in other
23 proceedings, for a number of years. But Dr. Orton is

25 And again, I think if -- that it's a perfectly
0220

02 answered, but it should be put to the expert.

03 MR. FRINK: I think we can hold the question until

05 HEARING OFFICER DEL PIERO: Okay. Mr. Canaday,
06 I'm going to sustain Mr. Birmingham's objection.

08 make a notation of that. On the 24th when Dr. Beschta
09 comes back, I want you to ask that question because I'm

11 Do we have any other questions of these
12 individuals? Seeing none, Gentlemen, thank you very

14 MR. BIRMINGHAM: At this time, the Department of
15 Water and Power for the City of Los Angeles and the

17 Mr. Pollack will conduct the examination of Mr. Miller.

18 HEARING OFFICER DEL PIERO: Fine. Again,

20 MR. POLLACK: Mr. Del Piero, we may need the
21 screen lowered.

23 your own tripod. I just do screens, not tripods.

24 Do you promise to tell the truth during the course

0221

01 MR. MILLER: I do.

03 Mr. Hasencamp is also involved in forecasting one of
04 the inputs into operating the L.A. aqueduct, so for the

06 we're asking Mr. Hasencamp to stay on that panel.

07 HEARING OFFICER DEL PIERO: Have a seat,

09 MR. HASENCAMP: Thank you.

10 HEARING OFFICER DEL PIERO: Mr. Miller, would you

12 MR. MILLER: Certainly. My name is Virginus,
13 V-I-R-G-I-N-I-U-S, Newton Miller the IIIrd.

15 Q And are you familiar with -- what is the next
16 number, Mr. Smith, for L.A. DWP exhibits?

18 147.

19 Q BY MR. POLLACK: Mr. Miller, are you familiar with

20 the document that Mr. Smith has just allowed me to
21 identify as L.A. DWP No. 147?

22 A BY MR. MILLER: Yes. Referring to my rebuttal
23 testimony, yes, I am.

24 Q Did you prepare that testimony?

25 A Yes, I did.

0222

01 Q Is Attachment 1 to L.A. DWP Exhibit 147 your
02 summary of qualifications?

03 A Yes, it is.

04 Q Can you briefly relate how your summary of
05 qualifications relates to the testimony marked as L.A.
06 DWP 147?

07 A Yes. In December of 1986, I received my Bachelor
08 of Science degree in civil engineering from the
09 University of California at Davis. My emphasis was in
10 structural engineering, and I took the relevant courses
11 listed, primarily structural design, but also
12 engineering, economics, water quality, hydrology, and
13 geotechnical engineering.

14 After graduating, I started working for the
15 Department of Water and Power. For a period of
16 approximately five and a half years, I worked in the
17 design division designing water structures including
18 water tanks, pumping plants, site work, hydrology work
19 related to runoff and runoff control. During that
20 time, I received my professional engineer's license. I
21 oversaw all aspects of projects from planning through
22 design through construction.

23 In August of 1992, I moved to my new position,
24 which is now supervision of the forecasting and
25 operations group within the aqueduct division. These

0223

01 groups oversee the preparation and implementation of
02 plans for the operation of the aqueduct system, amongst
03 other duties relevant to that system.

04 Q And what does the operator of the Los Angeles
05 aqueduct do?

06 A The operator of the Los Angeles aqueduct division
07 prepares plans and implements these plans to cover the
08 operations of the aqueduct for any given year, and what
09 I'd like to do next is to run you through the flow
10 chart to describe those operations as they occur.

11 Q Before you do that, let me ask a question so you
12 can respond to it. Can you summarize your testimony
13 which includes the operations plan?

14 A Yes, I can. If you'll allow me. If I speak
15 loudly, will this be acceptable? Can everybody hear me?

16 HEARING OFFICER DEL PIERO: Mr. Miller, you sound
17 like you have a voice comparable to another witness
18 that frequents this room, so we may not have difficulty
19 getting along.

20 MR. MILLER: Deep baritone does carry, doesn't
21 it?

22 To give you just a general idea of what we go
23 through every year, in the beginning of the runoff year
24 or just prior to it, we start what we call operations
25 planning. The first stage of this is to prepare a

0224

01 runoff forecast. This is done using data from our

03 taken from snow pillows, precipitation gauges, and
04 also, forecasts of long-range precipitation for any

06 This information is input into a program. From
07 that program we get a prediction of water supply which

09 emphasize supply. We have to know how much supply is
10 available before we can plan on how to utilize that

12 The next step is to prepare a prop run program.
13 This program forms the initial basis of how we will

15 averages. We try and figure out what our approximate
16 uses and losses are. These uses and losses can be in

18 of transit losses. They can be in the form of
19 irrigation uses, and various other questions that must

21 available supply.

22 This program is pretty good; however, it only

24 change and be very different from the averages used in
25 the prop-run program. Therefore, we use the initial

01 data here to prepare daily operations. It's in these
02 daily operations that we take care of the day-to-day

04 filling reservoirs, draining reservoirs. We also
05 prepare for maintenance operations or for special

07 Now, once these two programs have been run,
08 sometimes there will be contradictions between one,

10 If that's the case, we go back and revise the initial
11 prop-run program and then run daily operations program

13 if we have a good program, we move on and start
14 consulting with other DWP organizations, and those are

16 testimony.

17 We solicit their input about specific

19 that our highest deliveries be during the periods when
20 the City of Los Angeles has its highest demand, such as

22 that depending on what they intend to do as far as
23 supplying water to the city.

25 and adjusted our plans to meet their needs, we move on
0226

02 division head approves the plan, then we move on and
03 distribute this plan to the various affected

05 Now, comes the fun part and where 90 percent of my
06 job is, and that is updating the plans for daily

08 March and April, we are making a long-range forecast of
09 what the situation with the aqueduct operations will

11 Precipitation might not have been the way we wanted it
12 to. Who can predict the weather perfectly? We may
14 require shut downs for maintenance work. Timing of
15 runoff can vary considerably from what we plan on
17 plan.
18 And I think this constant updating of the plan is
20 as having no plan for operations. They maintain you
21 just fly this aqueduct system by the seat of your
23 where it starts. I would liken our operations of the
24 aqueduct system to flying an airplane. The first step,

0227

01 let's say you want to fly from Los Angeles to New York,
03 plan, which indicates how far you're going to go, what
04 stops you're going to make, what kind of route you're
06 initiate operations.
07 However, if, during your flight, you run into a
09 your way, or you start to run out of fuel, you may
10 modify that plan. You may not be able to make it to
12 "Well, geez, Chicago's as far as I can get." The
13 important thing, when you are flying an airplane or
15 crash the plane into the ground. The important thing
16 is that our plan constitutes a set of goals.
18 implementation of that plan, we have to change that
19 plan, otherwise significant damage could occur. And
21 the end of the runoff year, and we start the whole
22 process over again.
24 your testimony, Mr. Miller, regarding operation of Long
25 Valley Reservoir?

01 A BY MR. MILLER: Yes, I can. What I have up on the
02 screen here is a copy of Attachment No. 4 to my
04 Which Mono Basin is Available. As you can see, there
05 are three years here, and these are the actual
07 during those years. We have a dry year, a normal year,
08 and a wet year compared to the historical average

10 Now, as you can see, there's a great deal of
11 variability. In dry years, we tended to draw down the
13 primary purpose is for flow regulation and storage of
14 runoff. Any recreational uses or uses as a fishery are
16 runoff and regulation of flows.
17 Now, during wet years, we tend to keep the

19 the high runoff. As you can see, the runoff is stored
20 between June and approximately August. This is a

22 high, so we need room to accommodate these storages
23 while the runoff south of the reservoir is moving out

25 The problem that you could have, given setting a
0229

02 at the graph, this historical average roughly
03 corresponds to Fish and Game's recommendation of

05 during the period between June and August, reservoir
06 storage climbs sharply. If you were to move that up a

08 come so close to that capacity as to remove the
09 operator's flexibility to deal with changing

11 In the planning of our operations, flexibility is
12 everything. We can't predict exactly when runoff is
13 going to come, how much of it is going to come, or what
14 form it's going to take. I mean, it can come in as
15 certain rivers. It can come in just as regular flow.
16 We need flexibility in order to deal with this.
17 We also need flexibility in order to deal with such
18 problems as failures of portions of the aqueduct.
19 Therefore, setting it too high eliminates a large
20 amount of flexibility.

21 As I mentioned before, in dry years, we had taken
22 down the reservoir farther than that. This we
23 realized, or our department management realized and has
24 made a conscious decision after 1989 not to take the
25 reservoir as low as it did in 1989. Our management saw
0230

01 that the fact that taking the reservoir storage that
02 low reduced recreational opportunities at Long Valley
03 and also impacted the economy of the local town.
04 Knowing that, the department decided to keep storages
05 higher voluntarily.

06 That does not mean that we are restricting
07 ourselves to that. We need the flexibility to take the
08 reservoir lower in the cases of high years,
09 particularly since runoff can vary anywhere from 30
10 percent of the long-term average to over 170 percent of
11 the average.

12 Now, during wet years, if the storage was to go
13 higher than the 183,000 acre-foot capacity or any limit
14 like that, there is a risk of spilling the reservoir.
15 If that reservoir spills, there's a serious risk of
16 damage to department property as well as the Owens
17 River below Long Valley Reservoir and Pleasant Valley
18 because that water has to go somewhere.

19 Other problems could be in operations of it. Fish
20 and Game has decided that they feel we should not draw
21 down the reservoir during the periods between July and
22 October. Historically, those are periods when the
23 runoff south of the reservoir is lower. As that runoff
24 south of the reservoir declines, we need to pick the
25 flows up out of Long Valley to maintain steady flows

01 and keep water moving south. To limit drawdowns of the
02 reservoir during the late season will mean that water

04 into the river in the aqueduct will be less. The
05 water's got to come from somewhere.

07 the aqueduct without Mono Basin water available. Now,
08 on this one, as I've stated in the testimony, two of

10 aqueduct simulation model because we have no historical
11 precedent for them. Those are the normal-year

13 wet-year precipitation and operations of the aqueduct.
14 What we did in these cases was we took the actual

16 reservoir without Mono Basin water. But again, even
17 with no Mono water, no Mono Basin water available, as

19 tend to start trying to bring it down. If we have to

21 and Game's requirements we would have to do, we'd have

23 really start increasing our late season deliveries when

25 operational problems including the fact that it gets

01 very cold and sometimes the rivers tend to freeze up,

03 Reservoir. In other words, a lot of these restrictions

05 I think the main thing I'd like to emphasize

07 minimum storage or reducing drawdowns during certain

09 It is an interconnected series of facilities, be they

11 When you start putting restrictions on one of these

13 and the downstream portions.

15 unit. If you're going to propose anything and you're

17 manner that addresses the system as a whole, not just

19 Q I have one further question to ask you,

21 storage level of 125,000 acre-feet have during dry

23 A Well, as I stated, in dry years, as you can see,

25 set the flow or the minimum storage at 125,000, what's

01 going to happen is there's less water to take out of

03 below Pleasant Valley. That will have the effect of

05 Reservoir, reducing opportunities for recreation but,

07 water to the City of Los Angeles.

08 It could also effect how much water we have to
09 pump from the ground to meet irrigation needs in the
10 Owens Valley. It could mean drawing more water out of
11 the San Fernando Basin to meet water needs in the City
12 of Los Angeles.

13 Q Are there legal requirements for outflows from
14 other reservoirs below Crowley Lake Reservoir, excuse
15 me, that might be impacted by such a restriction?

16 A The current restriction that we face is a legal
17 agreement with the Department of Fish and Game to
18 provide a minimum outflow from Pleasant Valley
19 Reservoir of 75 cubic feet per second. That could be
20 impacted in a severely dry year.

21 MR. POLLACK: Thank you, Mr. Miller. That
22 concludes our direct testimony.

23 HEARING OFFICER DEL PIERO: Thank you,
24 Mr. Pollack.

25 Ms. Cahill?

0234

01 Does National Audubon have any cross-examination?

02 MR. VORSTER: I informed Bruce Dodge that there
03 were no questions necessary of Mr. Miller, so that's
04 why he left.

05 HEARING OFFICER DEL PIERO: You're representing
06 that Mr. Dodge actually left?
07 Please proceed, Ms. Cahill.

08 CROSS-EXAMINATION BY MS. CAHILL

09 Q Good afternoon, Mr. Miller.

10 Was it your understanding when you prepared your
11 testimony that the California Department of Fish and
12 Game had an inflexible recommendation of a minimum
13 storage level of 125,000 acre-feet in all year types?

14 A Yes, it was.

15 Q Were you provided with the testimony of Curtis
16 Milliron of the department to review before you
17 presented your testimony?

18 A Yes, I was.

19 Q Do you not recall, then, that Mr. Milliron
20 testified that, "It's my feeling that during a wet
21 year, it's probably not an issue," when he was asked
22 whether he had specific recommendations as to Crowley
23 Lake levels?

24 A Yes, I do remember that statement.

25 Q And do you recall that he said, "In dry years, I
0235

01 think it's common that we all give, and as
02 Mr. Hasencamp stated in a proposed water management
03 plan, they suggest a minimum level of 80,000 acre-feet,
04 that's slightly above what we have experienced in the
05 last several years and so I would be comfortable with
06 that"?

07 A No. I am not familiar with that statement.

08 MR. HASENCAMP: I also think that misstates my
09 testimony.

10 HEARING OFFICER DEL PIERO: That's not the issue.
11 That would have been an appropriate objection at the
12 time, but that's not the issue. The issue is she's
13 reading what he said.

14 Q BY MS. CAHILL: So you were not made aware that the
15 Department of Fish and Game indicated enough

16 flexibility that they might, in fact, accept a minimum
17 level of 80,000 acre-feet in dry years?

18 A BY MR. MILLER: No, I was not.

19 MR. BIRMINGHAM: Actually, I think, if the record
20 is clear, Mr. Del Piero, that was Mr. Milliron stating
21 what he thought Mr. Hasencamp said. What Mr. Milliron
22 thinks Mr. Hasencamp testified to is really
23 irrelevant. Mr. Hasencamp's testimony speaks for
24 itself.

25 HEARING OFFICER DEL PIERO: Obviously. As does
0236

01 Mr. Milliron's.

02 MS. CAHILL: Fish and Game apparently --

03 HEARING OFFICER DEL PIERO: Ms. Cahill, proceed.

04 I understand where we are, okay?

05 Q BY MS. CAHILL: All right. Did you read this
06 testimony and not see that?

07 A BY MR. MILLER: I read the testimony, yes.

08 Q Okay. And did you have the sense that the 125,000
09 acre-feet was an inflexible requirement or a
10 recommendation that the Department of Fish and Game was
11 asking Los Angeles to take into account?

12 A I had the understanding that it was a
13 recommendation that they very much were wanting to
14 pursue.

15 Q But would some of your concerns be alleviated if
16 you understood the department's recommendation not to
17 be an inflexible recommendation that this Board set
18 that as a target level, but more an input to Los
19 Angeles as to how we would like to see Long Valley
20 operated, if possible?

21 A I'm not sure I understand what you mean by a
22 "recommendation" that they put their input in. Do you
23 mean that -- well, can you explain that, please?

24 Q Yes. Are your concerns with inflexibility
25 reflected in your testimony based on the thought that

0237
01 the Department of Fish and Game's recommendation was an
02 inflexible recommendation that this Board set 125 as an
03 inflexible minimum storage level?

04 A To understand your -- my understanding of your
05 question, I would have problems with any kind of
06 recommendation requiring minimum storages being set by
07 the Department of Fish and Game, the absolute
08 recommendations.

09 In operating the aqueduct system as a whole and
10 Long Valley Reservoir in particular, the department
11 needs a great deal of flexibility in order to deal with
12 unforeseen circumstances.

13 Q You indicated that since the experience in 1989,
14 the Department of Water and Power has voluntarily
15 attempted to keep the level of Crowley higher than it
16 went in that year; is that right?

17 A That is correct.

18 Q And that is to take recreation into account?

19 A Yes.

20 Q Is the Department of Water and Power willing to
21 also at least consider what might be good for the
22 trophy fishery in Crowley Lake in determining how to
23 operate that reservoir?

24 A I believe you're asking me to make a policy
25 statement, and that is beyond both my expertise and my
0238 capabilities and my line of employment to make a policy
01 statement such as that.

02
03 Q Do you know whether, at this point in time, the
04 Department of Water and Power is taking recreation into
05 account?

06 A Yes, they are.

07 Q And at this time, are they in any way taking
08 fishery or fishing into account?

09 A Yes.

10 Q And are they willing to accept input from the
11 Department of Fish and Game in a given year with regard
12 to what might be beneficial for the fishery?

13 A Yes, we're willing to take input. In fact, we do
14 as matter of course.

15 Q On Page 6 of your rebuttal testimony, you list
16 potential results of limiting Long Valley Reservoir
17 draw down between July and October in wet years. What
18 is the definition of "wet year" in that case?

19 A In this case, wet year, as I used our department
20 definition, if I remember correctly, precipitation and
21 runoff greater than a 120 percent of Mono?

22 MR. HASENCAMP: For this run, I believe that is
23 correct.

24 Q BY MS. CAHILL: And where you state that, "One of the
25 consequences of limiting draw downs between late July
0239

01 and October is lower flows in the Owens River south of
02 Long Valley Reservoir." Which stretch of the Owens
03 River are you referring to?

04 A That would be the stretch of the Owens River
05 between Pleasant Valley Reservoir and Tinemaha
06 Reservoir.

07 Q Would that be what we call the Middle Owens?

08 A Yes, I believe so.

09 Q Do you know of any adverse impacts of having lower
10 flows in the Middle Owens?

11 A You mean direct knowledge or speculating?

12 Q Well, are you aware of any?

13 A I'm aware that there will be -- if there are lower
14 flows below Pleasant Valley Reservoir, there are less
15 opportunities for recreation. There are also problems
16 with meeting our irrigation requirements. If it gets
17 too low, it could cause problems such as that. Also,
18 during that period, we still have a net loss of water
19 between Pleasant Valley and Tinemaha Reservoir. There
20 are actual losses in transit, so that would, of course,
21 impact our operations.

22 Q When you refer, on Page 6, "That draw downs will
23 force L.A. DWP to set October through March flows
24 higher, which may prove infeasible to weather
25 conditions," has there ever actually been a time that
0240

01 the aqueduct downstream of Tinemaha has frozen?

02 A Yes, just this past year. When water temperatures
03 get extremely low, Tinemaha Reservoir, the water
04 temperature in Tinemaha gets very cold. The water
05 south of Tinemaha Reservoir begins to freeze up and

06 form what I believe is referred to in our northern
08 aqueduct.
09 What can happen with that is by limiting the
11 water in Tinemaha, which proves to be a problem because
12 as you store more water in Tinemaha, the surface area
14 colder. So you're faced with a Catch-22. In that
15 case, the only other option is to begin reduction of
17 course, entails reducing draw down of Long Valley
18 Reservoir.

20 commonly?
21 A It happens commonly.

23 A I can only speak to my experience. I've only been
24 operating the system for a year and a half, but in my

0241
01 last year. And it usually occurs for a couple of days.

03 find in the transcript references to flexibility, but
04 rather than take anyone's time, I will just conclude.

06 HEARING OFFICER DEL PIERO: Thank you very much,
07 Ms. Cahill.

09 Mr. Roos-Collins? Actually, Mr. Roos-Collins,
10 we're going to take a five-minute break because I've

12 minutes.
13 (Whereupon a recess was taken.)

15 CROSS-EXAMINATION BY MR. ROOS-COLLINS
16 Q Good afternoon, Mr. Miller. I'm Richard

18 proceeding.
19 A BY MR. MILLER: Good afternoon, Counsel.

21 A No, I have not.
22 MR. ROOS-COLLINS: Mr. Del Piero, there's your

24 HEARING OFFICER DEL PIERO: Actually, I think the
25 first one was sort of a false start, so this may have

01 been the first one.
02 MR. ROOS-COLLINS: Mr. Del Piero expressed a

04 seen.
05 HEARING OFFICER DEL PIERO: Your face is it, Sir.

07 Q BY MR. ROOS-COLLINS: Are you familiar with the June
08 10th, 1993, letter from Richard Nagel to Reg Cullin,

10 information request?
11 A BY MR. MILLER: No, I'm not.

13 I ask you to read the second paragraph on the first

14 page.

15 HEARING OFFICER DEL PIERO: Mr. Birmingham,
16 Mr. Dodge represented to me that you could read and
17 listen to two conversations at once. Is that not
18 true?

19 MR. MILLER: Did you state the second paragraph on
20 the first page?

21 MR. ROOS-COLLINS: I did.

22 HEARING OFFICER DEL PIERO: Oh, it isn't.

23 MR. MILLER: Okay. I've read the paragraph.

24 Q BY MR. ROOS-COLLINS: Mr. Nagel stated in that
25 paragraph, "The Los Angeles Department of Water and
0243

01 Power does not have any written documents stating
02 management practices used in operating Grant Lake
03 Reservoir."

04 Do you agree with that opinion?

05 A Yes, I do.

06 Q So the spreadsheet programs which constitute the
07 prop-run are not written documents stating management
08 practices used in operating Grant Lake Reservoir?

09 A No, they are not.

10 Q On Page 1 of your rebuttal testimony, you state
11 that the operations plan, quote, constitutes a set of
12 goals, unquote, for the aqueduct operations. What are
13 the goals for the operation of Grant Lake Reservoir?

14 A Are you talking about currently?

15 Q Yes.

16 A Currently, I am not involved directly in the
17 operation of Grant Reservoir because we are not
18 exporting water from the Mono Basin, so I really don't
19 feel I can address that issue.

20 Q Attachment 3 to your rebuttal testimony states,
21 "System capacities at various control points including
22 Grant Lake Reservoir;" is that correct?

23 A That is correct.

24 Q And among other things it recommends minimum
25 storage of 11,000 acre-feet and maximum storage of
0244

01 47,500 acre-feet in that reservoir; is that correct?

02 A That is correct.

03 Q So if this Board adopts a license amendment that
04 allows storage in Grant Lake Reservoir to remain
05 between 11,000 and 47,500 acre-feet, in your opinion,
06 would Grant Lake Reservoir be operated safely and
07 within its capacity?

08 A Yes.

09 Q Let's return to Page 1 of your --

10 A I would like to add one clarifying statement.

11 Q Please do.

12 A I believe it will be operated safely from an
13 operation standpoint. I can't speak to any other
14 aspect, such as the structural safety of the
15 reservoir. I want to be clear about that. You could
16 be operating the reservoir very high and an earthquake
17 could come along, and it would fail. As far as water
18 supply, yes, that would be safe.

19 Q Mr. Hasencamp, do you agree with that?

20 A BY MR. HASENCAMP: Could you restate the question
21 again, please?

22 Q What did you mean in Attachment 3 in recommending
23 minimum storage of 37,000 acre-feet and maximum storage
24 of 47,500 acre-feet in Grant Lake Reservoir?

25 A I meant that for the purposes of the LAAMP model
0245
01 and also L.A. DWP's LAASM model that for operational
02 planning, that these constraints should be used. These
03 are not recommended minimums as far as a hard number
04 because there are certain circumstances you might want
05 to go below 11,000, but for planning, for running
06 specifically the LAAMP model and for an extended
07 period, this is a good range for planning purposes.

08 Q Is there any document other than Attachment 3 to
09 Mr. Miller's written rebuttal testimony which describes
10 operational constraints in storage in Grant Lake
11 Reservoir that might differ from the recommended
12 minimum and maximum for planning purposes?

13 A There's Judge Finney's preliminary injunction,
14 which says that, "For the purposes of releasing water
15 to Mono Lake, in order to achieve 6377, Grant Lake does
16 not have to go below 11,480 acre-feet? As far as
17 operating for export, there's no restrictions on that.

18 Q Thank you.

19 Mr. Miller, let's return to Page 1 of your written
20 rebuttal testimony. In the section entitled Aqueduct
21 Operation Planning, you state that the plan, the
22 operations plan, quote, incorporates a great deal of
23 flexibility due to the extreme variability of
24 circumstances involved in operating the Los Angeles
25 aqueduct, unquote.

0246
01 Are you describing the operations plan as having a
02 great deal of flexibility?

03 A Yes.

04 Q Does the aqueduct system as well have a great deal
05 of flexibility?

06 A If the plan is properly prepared, it does. The
07 physical constraints of the system are enumerated in
08 Attachment 3. As an example, many of these maximum
09 flows that we have, they are physical constraints of
10 the system. So if I want to get 750 cfs out of South
11 Haiwee Reservoir, that's the maximum I can go. I can't
12 force 900 cfs out of that. So these physical
13 constraints in some cases are absolute maximums.

14 A properly prepared plan will always leave some
15 room below those maximums, as I believe I state on Page
16 4 of my testimony. I state that, "Under normal
17 operating conditions, flows and reservoir storages
18 range from slightly above the minimums to slightly
19 below the maximum levels given in Attachment 3." You
20 never want to have a plan where for five or six months
21 out of the year, you have to run a reservoir at a
22 maximum level or a minimum level or run a portion of
23 the aqueduct at a maximum or minimum level. You have
24 to give yourself some room to allow for the
25 unforeseen. You might have more runoff than you

0247
01 expect. You might have less. You need to give
02 yourself a little bit of room to operate, but above
03 all, flexibility is the very important thing in the

04 operations plan. These goals are not hard and fast.
05 If we state that our goal is to export 300,000
06 acre-feet of water to the City of Los Angeles and for
07 some reason runoff isn't what we expected to be, we're
08 not still going to say we're going to export 300,000
09 acre-feet of water to Los Angeles if it means draining
10 reservoirs and damaging the system.

11 Q Attachment 1 of your resume, states that, "You
12 evaluate aspects of ongoing litigation on operations."
13 You understand that this litigation may have an effect
14 on the flexibility of the aqueduct system?

15 A Yes, I do.

16 Q Let me ask you about the runoff forecast model
17 described in the second section on Page 1 of your
18 written rebuttal testimony. You state that, "Forecasts
19 are made around the 1st of the month in February,
20 March, April, and May;" is that correct?

21 A Yes, that is.

22 Q So the first forecast for 1994 will be made in
23 about two and a half weeks on the 1st of February?

24 A Correct.

25 Q And those forecasts are subsequently integrated
0248 into the operations plan?

02 A I don't know if you're misstating my testimony or
03 not, but what my testimony says is those forecasts are
04 used to make predictions of the runoff which is then
05 used to prepare the plan.

06 Q That is a better statement of your testimony, and
07 I apologize for misstating it.

08 Have you ever read an article at the beginning of
09 any year where a reporter compares the predictions of
10 various seers with actual events that occurred in the
11 prior year?

12 A Predictions on what?

13 Q Events like Princess Diana getting divorced, that
14 sort of thing?

15 A Yes, occasionally I do grab The Enquirer at the
16 market.

17 Q There is a point to this line of inquiry. Does
18 the forecasting group retroactively evaluate the
19 accuracy of your forecast of runoff?

20 A Yes, we do. Our forecasting group performs a
21 function known as the runoff recap which entails
22 gathering and analyzing various hydrologic data
23 provided by a northern district hydrology group. They
24 run that through a computer to figure out how much
25 runoff we did have and to see how that corresponds to

0249 the predicted runoff.

02 HEARING OFFICER DEL PIERO: It's like the NFL
03 Today.

04 Q BY MR. ROOS-COLLINS: What is the long-term accuracy
05 of your February 1st forecast?

06 A BY MR. HASENCAMP: If I could answer that, I've been
07 the chief forecaster for the last five years for the
08 Department of Water and Power, and I don't believe you
09 were here during my direct testimony. I covered
10 forecasting, and a great part of it was my testimony.
11 And February 1st, of course, the rain is quite large,

12 the possible outcome; March 1st is more narrow; April,
14 that great. We do have a handle on whether it's going
15 to be a relatively dry year or wet year, but as far as

17 HEARING OFFICER DEL PIERO: Excuse me,
18 Mr. Roos-Collins.

20 you make a final?

21 MR. HASENCAMP: You mean -- we have a February,

23 on an official scale. In-house, of course, we update
24 it, but we have -- May 1st is our last official

0250

01 HEARING OFFICER DEL PIERO: Thank you.

03 Q BY MR. ROOS-COLLINS: You just said that the February
04 1st forecast was not particularly accurate. In your

06 forecast in percentage terms?

07 A BY MR. HASENCAMP: Yes, we do.

09 1st forecast on a long-term basis?

10 A Unfortunately, I don't know that off the top of my

12 of the exhibits which does have the specific numbers,
13 and I would not want to -- I might know of several

15 Q Mr. Hasencamp, I will reserve further questions on
16 this issue until you return.

18 Q Mr. Miller, the prop-run plan serves as the
19 foundation for the daily operations program?

21 Q You state on Page 4 of your written rebuttal
22 testimony that the daily operations program is updated

24 conditions. By "constant," do you mean daily?

25 A Daily.

01 Q More frequently than daily?

02 A Monday through Friday, assuming working days, we

04 update it as necessary during the day depending on
05 requests that we may get from user groups or relayed to

07 on opening day last year, the fishing season, the
08 Bishop Chamber of Commerce requested that we increase

10 stated a certain flow was beneficial to the
11 recreational use and the people really thought it was a

13 our northern district personnel relaying that request,
14 we evaluated whether we could change operations to

16 and we did.

17 So yes, it's updated every working day for sure,

19 requests come to us from various groups within the

20 department or from our own needs.

21 Q Let's say that the daily operations program is
22 updated on Day Two to change Day One's release from
23 Grant Reservoir into Rush Creek. How quickly can the
24 actual operator of Grant Reservoir put into effect the
25 new release requirement in Day Two's daily operations

0252

01 program?

02 A In your question you said on Day Two you decide to
03 change Day One's operation?

04 Q Excuse me. If the question is confusing, and I
05 think it is, let me ask it differently.

06 Let's say that on Day One, the release from Grant
07 Reservoir is 20 cubic feet per second into Rush Creek.
08 You then revise the daily operations program for Day
09 Two and decide that the release into Rush Creek should
10 be 25 cubic feet per second. How quickly after that
11 operations plan is updated can the operator of Grant
12 Reservoir put that new release into effect?

13 A Okay. I'll describe the process that we use to
14 initiate flow changes in the northern district. When
15 we decide to initiate a flow change in the northern
16 district, we are not in control of the personnel who
17 actually make those changes, so we call our northern
18 district engineering group in the Bishop office and
19 request a change. Many of the times we do not specify
20 an exact time. Sometimes we will specify a day.
21 Sometimes we'll just say do it this week. But if need
22 be, a change can be implemented immediately,
23 particularly if it's an emergency.

24 However, normally, we would say -- say on Day One,
25 we decide to change the flows. We would call up

0253

01 northern district group and tell them, "Tomorrow,
02 please change the flows," and they will, if necessary,
03 dispatch a person specifically to do it or make that
04 part of their daily plan of duties in addition to
05 whatever else they are going to do.

06 Q Is the control device for the release from Grant
07 Reservoir into Rush Creek automated?

08 A I'm not familiar with the control device for the
09 releases of Grant Lake.

10 Q Mr. Hasencamp, are you familiar?

11 A BY MR. HASENCAMP: A little bit.

12 Q Do you have an answer to that question?

13 A By "automated," you mean from a remote facility?

14 Q Yes.

15 A No.

16 Q Same question for the diversion facility on Lee
17 Vining Creek?

18 A No, it is not. We do have a telemetry system to
19 give us a flow reading from a distant location. We
20 don't have control from a distant location.

21 Q So a person physically visits either facility in
22 order to control release into either stream?

23 A Yes, that's correct.

24 Q Mr. Miller, let's say that the daily operations
25 program calls for a release into Rush Creek of 25 cubic

0254

01 feet per second. How close would the actual release

02 come to the release specified in the program?
03 A BY MR. MILLER: Well, the program itself does not
04 specify the release. The releases are input by the
05 operator.
06 Q That question must not be clear. Let me ask the
07 question differently.
08 Can the operator of Grant Reservoir control the
09 release so that it is within a few percentage points of
10 the desired release specified in the daily operations
11 program?
12 A I can't speak to the accuracy of what those meters
13 are. That's beyond my expertise. You'd probably have
14 to ask our personnel in the Bishop office regarding the
15 accuracy of the measuring devices that they use.
16 Q Mr. Hasencamp, do you have an opinion about that
17 question?
18 A BY MR. HASENCAMP: Yes. The release from Grant Lake
19 is one of the more accurate release points within the
20 Mono Basin. So it is accurate to within a few cfs.
21 As far as the controlling, as far as the
22 measurement device, there's some additional error
23 between the measurement device and what's recorded, but
24 as far as what's recorded, you can get it within a few
25 cfs.

0255

01 Q Thank you.
02 MR. HERRERA: Mr. Roos-Collins, your 20 minutes
03 has expired.
04 MR. ROOS-COLLINS: Mr. Del Piero, I request an
05 additional ten minutes of time in order to complete my
06 examination of Mr. Miller. My grounds for requesting
07 the additional time is that he is presenting
08 information regarding the capacity of the aqueduct
09 system to respond to flow allocations which is novel to
10 me, at least, and critical, in our opinion, to this
11 Board's decisions.
12 HEARING OFFICER DEL PIERO: Granted. I understand
13 that Ms. Scoonover has, what, five minutes? Do you
14 expect to have a number of questions, Mr. Pollack?
15 MR. POLLACK: Not so far, but we'll see what
16 develops.
17 HEARING OFFICER DEL PIERO: Okay.
18 Proceed, Mr. Roos-Collins.
19 Q BY MR. ROOS-COLLINS: If my questions were innocuous
20 so far, you can rest easy.
21 Mr. Miller, Attachment 3 to your written testimony
22 identifies reservoirs in the aqueduct system. Does the
23 aqueduct system also have storage capacity in
24 groundwater basins?
25 A BY MR. MILLER: Yes, it does.

0256

01 Q Where?
02 A These would be groundwater basins in the Owens
03 Valley.
04 Q Now, can that capacity be used to store water that
05 is exported from the Mono Basin?
06 A BY MR. HASENCAMP: We're restricted in the amount
07 that we can pump by the green book restrictions in the
08 Owens Valley, and the current agreement calls for --
09 that pumping will be the same in the future as it was

10 in the last 20 years. And so when you say use the
11 groundwater basin as a storage, yes, water could be put
12 into that. Could water be taken out? Any additional
13 water? That's very questionable. So in that case,
14 it's not really a storage basin.

15 Q Thank you.

16 Mr. Miller, several days ago, Mr. Birmingham was
17 asked to provide a copy of an agreement between
18 Southern California Edison and the City of Los Angeles
19 affecting the operations of your respective facilities
20 on Lee Vining and Rush Creeks. He subsequently
21 provided a document I now show you. This document has
22 not yet been marked as an exhibit. It is entitled
23 Agreement of Sale and Purchase Between the Southern
24 Sierra Power Company and Associated Companies and
25 Department of Water and Power of the City of Los

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01 Angeles, and it appears to be dated in October of
02 1933.

03 To the best of your knowledge, is this agreement
04 still in effect?

05 A I have no knowledge of that agreement. I haven't
06 seen it before. I know it exists, but I have no
07 knowledge of the agreement itself.

08 Q Your testimony, on Page 2, in the bullets refers
09 to the fact that the operations plan must take into
10 account such elements as operation of Southern
11 California Edison reservoirs. How do you take into
12 account the operation of Southern California Edison
13 reservoirs in the development of your operations plan?

14 A The chief operator contacts the operators of
15 Southern California Edison reservoirs to find out their
16 plans for their operations including monthly releases
17 on average and things like that.

18 As I've said, I've never consulted that agreement,
19 so I'm not familiar with it.

20 Q In the last ten years, how many acre-feet of water
21 total have been delivered from the L.A. aqueduct system
22 to other parties for irrigation?

23 A Actually, if -- pardon me for one second. I need
24 to get one set of notes. Excuse me.

25 What I have are some figures by area. I can give

0258

01 you a 20-year average readily.

02 Q I modify my question for the last 20 years.

03 A Over 20 years, the average delivery of irrigation
04 stock water in the Mono Basin is 8,500 acre-feet. This
05 also reached a maximum of 12,000 acre-feet in 1986 and
06 a minimum of 1,000 acre-feet in 1991. That's per the
07 data that I had access to.

08 In the Long Valley area, the average from 1970 to
09 1990 was 19,900 acre-feet. The maximum delivered in
10 any one year was 41,600 acre-feet. The minimum was
11 8,830 acre-feet.

12 In the Round Valley area, the 1970 to 1989 average
13 was 8,300 acre-feet with a maximum year delivery of
14 10,800 acre-feet and a minimum yearly delivery of 4,500
15 acre-feet.

16 And the area from -- let's see. Where do I have
17 it? I'm looking for my figures on irrigation. The

18 next figure that I had available was Tinemaha to Haiwee
20 an average between 1970 and 1989 of 15,200 acre-feet
21 per year with a minimum value of 18,900 acre-feet a
23 value of 18,900 per year and a minimum of 11,000
24 acre-feet per year.

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01 unless you want this on the record, we would be more
03 computation sheet to you, and then we could stipulate
04 it into the record.

06 offer and accept it.

07 MR. HASENCAMP: If I could just say that the data

09 Los Angeles aqueduct simulation model documentation.
10 So all of the 20- year averages are available.

12 keep in mind this is not the net irrigation, but
13 applied irrigation. So there is return water from this

15 Q BY MR. ROOS-COLLINS: Understood.

16 Mr. Miller, let me turn now to LAASM. On Page 4

18 forecasting and operations groups are preparing
19 programs to allow the use of LAASM as the primary tool

21 that to say that you intend that LAASM will become part
22 of the actual operations model for the aqueduct system?

24 to help prepare plans to operate on a year-to-year
25 basis. As I state, "Development of spreadsheet

01 programs to use data from the LAASM for generation of
02 prop-runs will begin in 1994," so the data from the

04 prop-runs. The values from the prop-runs will then be
05 used to develop the daily operation sheet. It will be

07 replace any of the processes because it still requires
08 a lot of judgment and input from the operators.

10 the aqueduct system run by a computer.

11 Q So it is your intention that LAASM will be used in

13 aqueduct this year?

14 A I can't make that statement. I don't know

16 use. We will have to do some development work and
17 check it and make sure we're happy with it before we

19 plans.

20 A BY MR. HASENCAMP: We're in a transition phase in our

22 the other prop-run program. Now, we develop a new --
23 the L.A. aqueduct simulation model. Right now, it's

25 The next step within the model is to make it more of an

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01 annual model with much more controls on an annual
02 basis. And so it will be phased in as it's developed a
03 little more.

04 Q One final line of inquiry. Mr. Miller, your
05 written testimony describes the annual development of
06 an operations plan for the aqueduct system. Does the
07 Department of Water and Power have a long-term
08 supply-and-demand analysis which you use in developing
09 the annual operations plan?

10 A BY MR. MILLER: If you refer to a specific
11 document? Are you referring to a specific document?

12 Q I'm asking whether such a document exists.

13 A Not to my knowledge, no.

14 MR. ROOS-COLLINS: Thank you. No further
15 questions.

16 HEARING OFFICER DEL PIERO: Thank you very much.
17 Ms. Scoonover?

18 MS. SCOONOVER: I have a question of Mr. Hasencamp
19 that I think I'll hold until Tuesday, since we'll be
20 seeing you again, in order to keep things moving
21 quickly this evening.

22 That leaves me with just two brief questions for
23 you, Mr. Miller.

24 CROSS-EXAMINATION BY MS. SCOONOVER

25 Q You have described the process by which the Los
0262

01 Angeles Department of Water and Power prepares its
02 operations plans for the Los Angeles aqueduct and you
03 described a set of goals. You described that the plan
04 constitutes a set of goals for Los Angeles aqueduct
05 operations. Is that an accurate summary?

06 A BY MR. MILLER: Yes, it is.

07 Q Can you tell me is one of the goals to meet as
08 much of the Los Angeles area demand as possible with
09 eastern Sierra water?

10 A Yes.

11 Q My second question refers to some of your concerns
12 you voiced in keeping Long Valley Reservoir too high.
13 You said there was some damage that could occur from
14 uncontrolled spills from Long Valley Reservoir, and one
15 area that you specifically identified as unacceptable
16 to potential damage from high flows was the Owens
17 River.

18 Do you recall that testimony?

19 A Yes. It's on Page 6.

20 Q Are you familiar with the stretch of the Owens
21 River referred to as the Lower Owens River?

22 A Yes, I am.

23 Q And are you also familiar with the approximately
24 60-stream miles of historic channel in the Lower Owens
25 River, a large portion of which has no or low flows at

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01 this time?

02 A By "familiar," if you mean I'm aware of their
03 existence, yes. Do I know specifics about those
04 60-mile stretches, no, I do not.

05 Q Are you also familiar with the associated wetlands
06 that lie to both the east and the west of the Lower
07 Owens River?

08 MR. POLLACK: I'm going to object to that,
09 Mr. Del Piero. I fail to see the relevance to
10 Mr. Miller's testimony which dealt with aqueduct
11 operations and a question that dealt with wetlands as a
12 part of the Lower Owens River which is not part of the
13 aqueduct system.

14 MS. SCOONOVER: Wetlands immediately adjacent to
15 the Lower Owens River have a large effect on whether or
16 not the Lower Owens River is susceptible to damage from
17 high flows as Mr. Miller alleges. I'm simply trying to
18 get a little bit of background on his degree of
19 knowledge of the system, the Lower Owens River system.

20 HEARING OFFICER DEL PIERO: I'm going to overrule
21 the objection, but I'm going to caution you. The
22 nature of this witness' expertise may be limited to the
23 answer to that question and no others, but go ahead and
24 pursue it.

25 MS. SCOONOVER: I won't pursue it much further.

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01 Q BY MS. SCOONOVER: Do you recall the question?

02 A BY MR. MILLER: Actually, I would like you to repeat
03 the statement, but I also have a clarification for what
04 my testimony states.

05 HEARING OFFICER DEL PIERO: Let's take it one step
06 at a time.

07 Ms. Anglin, would you read the question back?

08 (Whereupon the record was read by the Reporter.)

09 MR. MILLER: I would have to give you the same
10 answer that I gave on the question previous to that. I
11 am familiar with their existence. I am not familiar
12 with the specifics of what they look like or anything
13 like that.

14 Q BY MS. SCOONOVER: So you would be unable to answer
15 questions regarding the capacity of these wetlands to
16 carry overflow, to handle overflow?

17 A BY MR. MILLER: That is correct.

18 Q In the Lower Owens River?

19 A That is correct.

20 MS. SCOONOVER: That's all. Thank you.

21 MR. MILLER: The one clarification I would like to
22 make to my testimony, though, is when I stated that
23 uncontrolled spills from Long Valley could result in
24 damage to the Owens River, and I believe this question
25 came out under cross-examination, was I meant the

0265

01 Middle Owens River immediately below the Pleasant
02 Valley Reservoir.

03 MS. SCOONOVER: So --

04 MR. MILLER: I was not speaking to damage in the
05 Lower Owens, I was speaking to potential for damaging
06 the Middle Owens.

07 MS. SCOONOVER: Middle Owens. Thank you.

08 HEARING OFFICER DEL PIERO: Thank you very much.

09 Mr. Frink?

10 MR. FRINK: I have none, but Mr. Satkowski does.

11 HEARING OFFICER DEL PIERO: Mr. Satkowski?

12 CROSS-EXAMINATION BY THE STAFF

13 Q BY MR. SATKOWSKI: I just have I believe three
14 questions. The first one deals with Attachment 5,
15 which is Long Valley Reservoir Storage, No Mono Basin

16 Water.

17 Down near the dry-year line, it's labeled 1990
18 through 1991, there's a couple of asterisks, and when
19 you look down at the asterisks, it says that, "The
20 actual 1972-73 dry year, Long Valley Reservoir
21 storage." Can you explain what this means?
22 A BY MR. MILLER: You've caught us in an error. What
23 this data is, as I pointed out in my earlier testimony,
24 is for no Mono water Basin available. We have only had
25 historical operations for a dry year. So that double

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01 asterisk should read, "Actual 1990 to 1991 dry-year,
02 Long Valley Reservoir storage." Not '72-73, as it is
03 shown on the graph. That appears in error.

04 Q Thank you.

05 My other questions deal with Attachment 3, which
06 is Los Angeles Aqueduct System Capacities, and I guess
07 this question is for either of you. In the table, the
08 fourth line down, Tinemaha Reservoir, historical
09 maximum storage is about 16,000 acre-feet. The
10 recommendation for the maximum on that reservoir is
11 6,300 acre-feet. For the record, can you explain why
12 the large difference?

13 A Certainly. Currently, Tinemaha Reservoir is under
14 a state order from the State Division of Dam Safety to
15 be held at a lower elevation. The previous high led to
16 a storage of 16,000, approximately, 300 acre-feet.
17 Currently, due to the limitations regarding safety of
18 that dam, it's current maximum storage is limited to
19 6,300 acre-feet.

20 The department is preparing a plan to begin
21 remedial work on the reservoir to increase its
22 capacity, but this will, of course, require approval
23 from the State Division of Safety of Dams.

24 Q How long do you believe it would take to get this
25 approval?

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01 A That's really out of my expertise and my group is
02 not preparing the plans to submit to the state. I
03 really don't have a firm timetable on that now.

04 Q Okay. In the Grant Lake Reservoir line, the
05 recommended minimum is 11,000 even. Is that L.A.'s
06 recommendation, or is it 11,500?

07 A BY MR. HASENCAMP: This is not a recommendation for a
08 hard condition. This is a recommendation for use in
09 the LAAMP planning model. We're not recommending that
10 a minimum 11,000 be put on the reservoir. We're saying
11 for long-term planning purposes, use that as the
12 minimum.

13 Q Use 11,000?

14 A Yes.

15 A BY MR. MILLER: Again, that's for long-term
16 planning. As I've mentioned before, the flexibility of
17 storage is paramount. If it looks like we're getting a
18 really heavy year up there, we will need to have
19 reserve storage in Grant Lake Reservoir or any of the
20 other reservoirs. Therefore, we may have to go below
21 these recommended minimums.

22 Q My last question deals with the Pleasant Valley
23 outflow. In the historical maximum column, it shows

24 809 cfs. The recommendation for maximum flow from
25 Pleasant Valley is 600 cfs. Why the discrepancy
0268
01 there?
02 A BY MR. HASENCAMP: Well, Pleasant Valley used to have
03 a larger capacity than it does now, and the historical
04 maximum is when the reservoir was at capacity and
05 spilling. When both of those things were taking place,
06 through the power plant and through the bypass, we
07 could get 809 cfs. But again, for planning purposes
08 and for long-range planning, through the power plant,
09 600 cfs, and if you want to use the bypass, then 700
10 cfs is a usable number, a reasonable number to use.
11 Q Could you also get 800 cfs through the system if
12 you were to use the bypass?
13 A No. Not without encroaching the maximum.
14 Pleasant Valley, like Tinemaha, has a lower maximum
15 than it historically had. So unless you take Pleasant
16 Valley above the legal level and, in fact, spill it,
17 then you can get more water through the bypass.
18 A BY MR. MILLER: And to spill that reservoir requires
19 permission from the State Division of Dam Safety, and
20 we have to try and get that very far ahead of time.
21 And they are not very willing to give that out on just
22 a, you know, a one-phone-call basis. The only time
23 they've allowed it in the recent past was for
24 maintenance purposes of the Pleasant Valley Power
25 Plant. When we couldn't flow water through the power
0269
01 plant, they will allow to us raise the reservoir and
02 spill it.
03 MR. SATKOWSKI: Thank you very much. Those are
04 all the questions I have.
05 HEARING OFFICER DEL PIERO: Mr. Smith?
06 MR. SMITH: I have no questions. Thank you.
07 HEARING OFFICER DEL PIERO: Mr. Herrera?
08 MR. HERRERA: I have one question.
09 Q BY MR. HERRERA: Are there any restrictions from the
10 Department of Fish and Game for maximum releases out of
11 Pleasant Valley Reservoir?
12 A BY MR. MILLER: There are none that I am aware of.
13 Q Mr. Hasencamp?
14 A BY MR. HASENCAMP: I don't believe there are.
15 MR. HERRERA: Thank you.
16 HEARING OFFICER DEL PIERO: Mr. Canaday?
17 Q BY MR. CANADAY: This would be for either one of
18 you. On the telemetry, how far -- what's the sending
19 range of the telemetry, let's say, from the Grant Lake
20 of the measuring devices? Is there a limitation on the
21 range?
22 A BY MR. MILLER: I'm not an expert on the telemetry,
23 but our telemetry divisions, such as those, go to our
24 Bishop office either through hard wire or radios, and
25 once it's in Bishop, it can be entered into a computer,
0270
01 and from there it can go anywhere.
02 Q My last question is for Mr. Miller. When you're
03 going through these planning operations for a
04 particular water year and you identify different
05 irrigation amounts of water in various places along the

06 system, is that part of the planning? Is there a
07 switch in your planning criteria that evaluates whether
08 you reduce the irrigation deliveries?

09 A Okay. I am not directly involved in setting
10 irrigation limits on water. That is handled by our
11 Bishop office.

12 What we do during the planning of the operations
13 is we consult with our personnel in the Bishop office
14 to find out how much water they plan to deliver. Now,
15 our normal commitment is five acre-feet of water per
16 acre of irrigated land. However, we do have the option
17 during dry years to reduce that.

18 Q When you say "we," the Bishop office has that
19 option, or is it --

20 A We, the Department of Water and Power.

21 MR. CANADAY: All right. Thank you.

22 HEARING OFFICER DEL PIERO: Mr. Frink, you have
23 one question?

24 MR. FRINK: Yes. I do have a followup on the
25 question Mr. Satkowski asked about the maximum storage

0271

01 capacity of Tinemaha Reservoir.

02 Q BY MR. FRINK: Mr. Miller, I believe you indicated
03 that the maximum reflected in Attachment 3 is a result
04 of the restrictions imposed by the Division of Safety
05 of Dams. Mr. Satkowski asked if you knew how long it
06 would be until you had the approval to go higher.

07 Has the Department of Water and Power made any
08 improvements on Tinemaha Reservoir in response to the
09 Division of Dam Safety's requests?

10 A BY MR. MILLER: No. We have not made any
11 improvements. We have started the process to improve
12 the reservoir. We've begun doing geological studies
13 and investigations, but we have made no physical
14 modifications to the reservoir.

15 Q Mr. Hasencamp, I believe Mr. Miller stated he
16 didn't know how long it would be until the Department
17 of Water and Power could expect approval from the
18 Division of Dam Safety. Do you have an opinion on
19 that?

20 A BY MR. HASENCAMP: No, I do not.

21 MR. FRINK: Thank you.

22 HEARING OFFICER DEL PIERO: I have one question in
23 regards to that matter, Gentlemen.

24 CROSS-EXAMINATION BY THE BOARD

25 Q BY HEARING OFFICER DEL PIERO: Have you identified a
0272

01 strategy yet as to addressing the problems that the
02 Division of Dam Safety have identified?

03 A BY MR. MILLER: That question would probably be best
04 addressed by our dams and geology group.

05 Q The question I'm asking is has an action been
06 taken by whoever is in authority to identify a repair
07 or improvement strategy?

08 A As I stated, we've initiated the studies to come
09 up with a plan of action.

10 Q But they are not completed?

11 A No. We don't have any recommended plan yet. We
12 are in the initial stages.

13 Q Have you completed an environmental impact report

14 on it?
15 A Not to my knowledge.
16 Q Are you still scoping the basis of the work?
17 A I'm not aware of any activities of that sort as
18 far as --
19 Q Is it being done by someone on your staff or is it
20 being done by a consultant? Or do you know?
21 Mr. Hasencamp, do you know?
22 A BY MR. HASENCAMP: In the past, our practice has not
23 been to improve the reservoirs, but to determine what
24 operation is safe. If there was an earthquake, how
25 much would the dam slump. It's too costly to get in
0273
01 there and actually bring these reservoirs up to the
02 standard.
03 Q So what course of action is being pursued by the
04 Department of Water and Power in regard to this matter?
05 A Well, we've already gone through at South Haiwee.
06 We've got, just in the last couple of years, the
07 maximum South Haiwee restored to 27,000 acre-feet. So
08 that was a number one priority.
09 A BY MR. MILLER: I will address this. I have been in
10 with a meeting with the group, Water Engineering
11 Design, which is a division of Water and Power. They
12 have personnel who are working on a remediation plan
13 for the reservoir. We have indicated that we don't
14 want any storage lower than 63,000 acre-feet, and if
15 possible and if they can come up with a remediation
16 plan that will allow higher storages, they should
17 pursue that matter.
18 Now, whether they're going to actually do the
19 calculations or not, I'm not sure, and whether they
20 have any consultants on board performing those
21 calculations, I'm not sure.
22 Q How recently was that?
23 A Probably within about the last six months or so.
24 MR. FRINK: I believe Mr. Miller meant to state
25 lower than 6300 acre-feet not lower than 63,000?
0274
01 MR. MILLER: That would be correct.
02 MR. FRINK: Thank you.
03 HEARING OFFICER DEL PIERO: Mr. Birmingham?
04 MR. POLLACK: Actually, it's me.
05 HEARING OFFICER DEL PIERO: I'm sorry,
06 Mr. Pollack. Forgive me.
07 MR. POLLACK: Can I have just a moment?
08 HEARING OFFICER DEL PIERO: Certainly, Sir.
09 MR. BIRMINGHAM: We only have a half an hour of
10 questions, Mr. Del Piero.
11 MR. POLLACK: We have no redirect, Mr. Del Piero.
12 HEARING OFFICER DEL PIERO: Thank you very much,
13 Mr. Pollack.
14 I'll recall --
15 MR. BIRMINGHAM: As Ms. McKeever said several
16 months ago, I lost control of this a long time ago.
17 HEARING OFFICER DEL PIERO: I'll recall
18 Mr. Birmingham's lame joke on Tuesday.
19 HEARING OFFICER DEL PIERO: Ms. Cahill?
20 MS. CAHILL: One question.
21 CROSS-EXAMINATION BY MS. CAHILL

22 Q Mr. Miller, again on Attachment 3 where you have
23 the maximum and minimums listed for your reservoirs,
24 are there any legally required minimum pools for any of
25 those reservoirs?

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01 A BY MR. MILLER: Not that I'm aware of, no.

02 MS. CAHILL: Thank you.

03 HEARING OFFICER DEL PIERO: Thank you very much.

04 Mr. Roos-Collins?

05 MR. BIRMINGHAM: Is this a question by

06 Mr. Vorster?

07 MR. ROOS-COLLINS: It is. Would you prefer that
08 he ask it?

09 MR. VORSTER: I'll ask it.

10 MR. BIRMINGHAM: You know Bruce Dodge has a rule
11 about these questions and the rule is you take them
12 like this and you throw them over your shoulder. Let
13 the record reflect that I have returned
14 Mr. Roos-Collins' question to him.

15 HEARING OFFICER DEL PIERO: I appreciate that.

16 MR. ROOS-COLLINS: That story brings to mind the
17 Biblical saying about throwing pearls to swine. And in
18 case that's too abstract, I'm characterizing
19 Mr. Vorster's question as pearls.

20 CROSS-EXAMINATION BY MR. ROOS-COLLINS

21 Q Mr. Hasencamp, in answer to one of my earlier
22 questions, you referred to the green book. Does the
23 green book restrict the Department of Water and
24 Power's storage of excess water in the Big
25 Pine volcanic formation?

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01 MR. POLLACK: Mr. Del Piero, while I didn't object
02 the first time the green book was mentioned, the
03 testimony that is being offered today is regarding
04 aqueduct operations in regard to Crowley Lake and this
05 proceeding, the Mono Basin. And Mr. Roos-Collins is
06 now bringing up the Owens Valley, which is the subject
07 of long litigation and controversy and a completely
08 different situation. I fail to see the relevance as
09 regards this proceeding.

10 MR. ROOS-COLLINS: The relevance, Mr. Del Piero,
11 is based on the representation by Mr. Miller in which
12 Cal-Trout joins that the aqueduct system should be
13 considered as an integrate whole and what happens in
14 one part affects the other. I'm asking about the
15 capacity of one part of the aqueduct system to store
16 groundwater given the possible effect on the Mono
17 Basin.

18 HEARING OFFICER DEL PIERO: Ms. Scoonover?

19 MS. SCOONOVER: Mr. Hasencamp did indeed raise the
20 green book in answer the one of Mr. Roos-Collins'
21 previous questions. Mr. Hasencamp will be back next
22 Tuesday. Perhaps you could wait 'til then to ask
23 Mr. Hasencamp more about the green book.

24 HEARING OFFICER DEL PIERO: We can take care of it
25 now.

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01 I'm going to overrule your objection, okay? But
02 let's not get too far afield on this, okay?

03 MR. ROOS-COLLINS: Thank you.

04 HEARING OFFICER DEL PIERO: Did you understand the
05 question, Mr. Hasencamp?
06 MR. HASENCAMP: I think I do.
07 HEARING OFFICER DEL PIERO: If you would prefer to
08 have it read back to you, Sir, we can do that.
09 MR. HASENCAMP: No, that's okay.
10 HEARING OFFICER DEL PIERO: Okay.
11 MR. HASENCAMP: I'm not aware of that.
12 Q BY MR. ROOS-COLLINS: Thank you.
13 We previously discussed the use of automated
14 devices to control releases from Grant Reservoir and
15 other facilities in the Mono Basin. Are flow -- are
16 automated flow control devices used anywhere in the
17 L.A. aqueduct system to control releases from
18 reservoirs?
19 A BY MR. MILLER: By -- well, if you mean like remote
20 control?
21 Q I do.
22 A The valves at the power houses are controlled from
23 within the powerhouse, but they are not controlled
24 from, say, like Bishop office or anything like that.
25 They're controlled at the facility, itself, but they do
0278
01 have remote operators.
02 Q Have the forecasting and operations groups
03 investigated the possibility of installing remote
04 control devices at your Mono Basin facilities?
05 A No, we have not.
06 MR. ROOS-COLLINS: Thank you. No further
07 questions.
08 HEARING OFFICER DEL PIERO: Thank you.
09 Mr. Miller, would that serve any purpose?
10 MR. MILLER: It would make flow changes easier to
11 do, certainly. You wouldn't have to dispatch a person
12 out there with the associated costs.
13 HEARING OFFICER DEL PIERO: How long does it take
14 to dispatch a person to that location?
15 MR. MILLER: You'd have to ask our Bishop office
16 about what the average turnaround time --
17 HEARING OFFICER DEL PIERO: Mr. Hasencamp, do you
18 have a sense?
19 MR. HASENCAMP: Not very long. We have a person
20 in the Mono Basin fairly routinely, and we make changes
21 usually every day.
22 HEARING OFFICER DEL PIERO: What is it, 45
23 minutes?
24 MR. HASENCAMP: It depends on the time of day. In
25 the morning, certainly within an hour, if it's the
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01 first thing in the morning.
02 MR. MILLER: Mr. Del Piero, to answer part of your
03 question, too, one of the reasons is we usually call in
04 changes about a day ahead of time so that it can be
05 done with our aqueduct and reservoir keepers as part of
06 their morning routine when they take readings and such.
07 HEARING OFFICER DEL PIERO: Ms. Scoonover?
08 MR. SCOONOVER: I have no further questions.
09 HEARING OFFICER DEL PIERO: Mr. Frink?
10 MR. FRINK: No questions.
11 HEARING OFFICER DEL PIERO: Mr. Satkowski?

12 MR. SATKOWSKI: No questions.
13 HEARING OFFICER DEL PIERO: Mr. Smith?
14 Mr. Canaday? Mr. Herrera? Any further questions,
15 Sir?
16 Gentlemen, thank you very much for your kindness
17 and participation. Mr. Hasencamp, we'll see you next
18 week. Mr. Miller, I don't know if we'll see you again,
19 but it's been a pleasure.
20 Ladies and Gentlemen, unless there are any
21 procedural items to take care of, I'll see you Tuesday
22 morning at 8:30. Good. Thank you.
23 (Whereupon the hearing was adjourned at 5:30 p.m.)
24 ---o0o---
25

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01 REPORTER'S CERTIFICATE

01
02 ---o0o---
02
03 STATE OF CALIFORNIA)
03) ss.
04 COUNTY OF SACRAMENTO)
04
05 I, KELSEY DAVENPORT ANGLIN, certify that I was the
06 official court reporter for the proceedings named
07 herein; and that as such reporter, I reported, in
08 verbatim shorthand writing, those proceedings, that I
09 thereafter caused my shorthand writing to be reduced to
10 typewriting, and the pages numbered 1 through 279
11 herein constitute a complete, true and correct record
12 of the proceedings:
13
14 PRESIDING OFFICER: Marc Del Piero
15 JURISDICTION: State Water Resources Control Board
16 CAUSE: Mono Lake Diversions
17 DATE OF PROCEEDINGS: January 14, 1994
18
19 IN WITNESS WHEREOF, I have subscribed this
20 certificate at Sacramento, California, on this 31st day
21 of January, 1994.
22
23
24
24 _____
25 Kelsey Davenport Anglin, RPR
25 CM, CSR No. 8553
25