1	BEFORE THE		
2	CALIFORNIA STATE WATER RESOURCES CONTROL BOARD		
3			
4	CALIFORNIA WATERFIX WATER) RIGHT CHANGE PETITION)		
5			
6			
7	JOE SERNA, JR. BUILDING		
8	CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY		
9	COASTAL MEETING ROOM		
10	1001 I STREET		
11	SECOND FLOOR		
12	SACRAMENTO CALIFORNIA		
13	PART 2 REBUTTAL		
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24	Candace Yount, CSR No. 2737 (p.m. session)		
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2	CALIFORNIA WATER RESOURCES BOARD
3	Division of Water Rights
4	Board Members Present
5 6	Tam Doduc, Co-Hearing Officer: Felicia Marcus, Chair and Co-Hearing Officer: Dorene D'Adamo, Board Member
7	Staff Present
8 9	Andrew Derringer, Senior Staff Attorney Conny Mitterhofer, Senior Water Resources Control Engr.
10	Staff Assistants
11	Kevin Long and Megan Raisis
12	For California Department of Water Resources
13 14	Tripp Mizell, Senior Attorney
15 16	Duane Morris, LLP By: Thomas Martin Berliner, Attorney at Law By: Jolie-Anne Ansley, Attorney at Law
17	U.S. Department of the Interior, Bureau Reclamation, and Fish and Wildlife Service
18 19	Amy Aufdemberge, Assistant Regional Solicitor
20	State Water Contractors
21 22	Stefanie Morris, Attorney Adam Kear, Attorney Becky Sheehan, Attorney
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25	(Continued)

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1	APPEARANCES (continued)
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5	San Joaquin County Thomas Keeling
6	Inollas Reelling
7	Local Agencies of the North Delta and Friends of Stone Lakes
8	Osha Meserve
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1 Tuesday, August 14, 2018 9:30 a.m.

- 2 PROCEEDINGS
- 3 ---000---
- 4 CO-HEARING OFFICER DODUC: Good morning,
- 5 everyone. Welcome back to the Coastal Hearing Room and
- 6 welcome back to this Water Right Change Petition
- 7 Hearing for the California WaterFix project.
- 8 I am Tam Doduc. To my right is Board Chair
- 9 and Co-Hearing Officer Felicia Marcus. I believe we
- 10 will be joined shortly by Board Member DeeDee D'Adamo,
- 11 who will be sitting to the Chair's right. To my left
- 12 are Andrew Deeringer and Conny Mitterhofer. We are
- 13 also being assisted today by Mr. Long and Ms. Raisis.
- Our usual three announcements. If an alarm
- 15 sounds, we will evacuate. We will take that stairs
- 16 down to the first floor and meet in the park. If you
- 17 are not able to use the stairs, flag one of the
- 18 security people, and you will be directed somewhere
- 19 else.
- 20 Secondly, please speak into the microphone
- 21 when providing your comments today, and make sure that
- 22 it's turned on and that the green light is lit. And
- 23 begin by stating your name and affiliation.
- 24 Thirdly and most importantly, please take a
- 25 moment to put all your noise-making devices to silent,

- 1 vibrate, do not disturb.
- 2 Any housekeeping matters? All right.
- 3 I believe we will begin today with Ms. Meserve
- 4 completing her cross-examination of this panel. Then
- 5 we will ask petitioners if they would like to request
- 6 any redirect. And after that, we will then go to
- 7 presentation of petitioners Panel 3 witnesses, which I
- 8 believe Mr. Mizell has estimated to take about an hour.
- 9 And then after that, I will ask for those who wish to
- 10 conduct cross-examination to come up and provide me
- 11 with a time estimate. And based on that, we will plan
- 12 out the next few days, perhaps even the rest of this
- 13 week.
- 14 So with that, Ms. Meserve, the mike is yours.
- MS. MESERVE: Good morning, Osha Meserve for
- 16 LAND and Friends of Stone Lakes.
- 17 I'm going to go ahead and begin with some
- 18 questions regarding the 1143 2nd Revised.
- 19 CO-HEARING OFFICER DODUC: And, actually,
- 20 since I've now being ruled, can you go ahead and give
- 21 us an outline of the remainder of your cross? So 1143?
- 22 MS. MESERVE: 1143 2nd Revised. And some of
- 23 these may also go to the Supplemental EIR as areas that
- 24 were permitted to be asked about, each of the new
- 25 information.

1 CO-HEARING OFFICER DODUC: And Ms. Meserve,

- 2 you need to please speak into the microphone.
- 3 THE REPORTER: Yes, please.
- 4 CO-HEARING OFFICER DODUC: I see Debbie making
- 5 faces at me.
- 6 THE REPORTER: Sorry.
- 7 MS. MESERVE: Okay, great. And so all the
- 8 questions go to that and the modeling assumptions. And
- 9 I'm not quite sure which of the panelists will be
- 10 answering them, honestly. So. . .
- 11 CO-HEARING OFFICER DODUC: All right.
- MS. KRISTEN WHITE, DR. NANCY PARKER,
- DR. CHANDRA CHILMAKURI and
- MR. ERIK REYES,
- called as Part 2 Rebuttal Panel 2
- 16 witnesses by the petitioners, having
- been previously duly sworn, were
- 18 examined and testified further as
- 19 hereinafter set forth:
- 20 CROSS-EXAMINATION BY MS. MESERVE (Resumed)
- 21 MS. MESERVE: So to begin with -- for
- 22 Ms. White, to begin with, I think, was the Bureau
- 23 involved in developing DWR-1143 2nd Revised?
- 24 WITNESS WHITE: We were certainly involved in
- 25 developing all the assumptions, but we did not

- 1 specifically draft the table.
- 2 MS. MESERVE: But the Bureau reviewed the
- 3 table prior to its submittal?
- 4 MS. AUFDEMBERGE: Objection. This is beyond
- 5 the scope of Ms. White's testimony.
- 6 CO-HEARING OFFICER DODUC: It goes to 1143.
- 7 Overruled.
- 8 WITNESS WHITE: I definitely reviewed the
- 9 table. I don't know that data was submitted and
- 10 whether or not that was before. I apologize.
- 11 MS. MESERVE: I'm sorry. I couldn't hear you.
- 12 WITNESS WHITE: I said I definitely reviewed
- 13 it. I don't recall whether or not I was reviewing it
- 14 prior to it being submitted or not.
- 15 MS. MESERVE: So at some point you reviewed
- 16 the DWR 2nd Revised, but you're not sure when in the
- 17 time frame of submittal?
- 18 WITNESS WHITE: Correct.
- 19 MS. MESERVE: Is it your understanding that
- 20 DWR-1143 2nd Revised assumes that the Bureau would
- 21 comply with the new criteria in the proposed action on
- 22 Pages 3 through 6 of that table?
- 23 WITNESS WHITE: Can you repeat that question
- 24 and bring up what pages you're talking about?
- 25 MS. MESERVE: Sure. So DWR-1143 2nd Revised,

1 if we can bring that up, and then Pages 3 through 6 are

- 2 labeled "New Criteria Included in Proposed Action."
- 3 So the question is is it your understanding
- 4 that DWR-1143 2nd Revised assumes that the Bureau would
- 5 comply with these new criteria that are included in the
- 6 proposed action, Pages 3 through 6?
- 7 MS. AUFDEMBERGE: Objection. We're headed
- 8 somewhere way beyond the scope of Ms. White's
- 9 testimony. Ms. White is here to talk about storage and
- 10 release restrictions on the CVP reservoirs on the Delta
- 11 and support of Ms. Parker's analysis of that.
- MR. MIZELL: And if I might add, DWR-1143 was
- 13 finalized by DWR, and in our submission cover letter, I
- 14 indicated that the witnesses who would best be able to
- 15 speak to the content of 1143 are Dr. Chilmakuri and
- 16 Mr. Reyes.
- 17 CO-HEARING OFFICER DODUC: So noted. But the
- 18 intent of DWR-1143 is to convey or at least help all of
- 19 us better understand the operating assumptions for the
- 20 proposed project which is to be jointly operated by
- 21 both petitioners. So I believe it's fair game for
- 22 Ms. Meserve to ask Ms. White or Ms. Parker, for that
- 23 matter, these questions.
- 24 And answer to the best of your ability,
- 25 recognizing that you did not perhaps have a specific

- 1 role in developing the actual document itself.
- 2 I believe Ms. Meserve's question goes towards
- 3 the -- to better understand how or to what extent you
- 4 agree with these proposed operating criteria that were
- 5 submitted on behalf of both petitioners.
- 6 WITNESS WHITE: My understanding is that
- 7 Reclamation and DWR will jointly operate the WaterFix
- 8 and their main system to comply with all applicable
- 9 regulations including those in this proposed action.
- MS. MESERVE: And then on Page 7 of that
- 11 table, there are existing Delta criteria listed.
- 12 And is it your understanding that the Bureau
- 13 would also comply with those existing criteria?
- 14 MR. BERLINER: Objection, asked and answered.
- 15 We've been through this multiple times regarding D1641,
- 16 et cetera.
- 17 CO-HEARING OFFICER DODUC: Ms. Meserve, it is
- 18 at least my assumption and based on now Ms. White's
- 19 answer that, indeed, both petitioners are proposing
- 20 jointly these criteria to which they will operate.
- 21 Are you trying to get at something else?
- MS. MESERVE: Well, I'd like to test that
- 23 using the Exhibit NRDC-204, which is a letter from the
- 24 Bureau, if we could look at that, on Page 3. It's a --
- 25 and it states on Page 3 that State Water Board -- in

- 1 the middle of the page -- does not have unfettered
- 2 discretion to impose regulatory constraints that
- 3 interfere with the Congressional authorized purpose of
- 4 the Reclamation project.
- 5 MR. MIZELL: To the extent that Ms. Meserve
- 6 wants to test whether or not Reclamation is actually
- 7 proposing the operational criteria indicated in
- 8 DWR-1143, her question could get to that answer.
- 9 When it comes to asking questions about
- 10 federal preemption opinions of the Department of the
- 11 Interior, that is well beyond the scope of 1143, the
- 12 supplemental document, or any of the testimony of the
- 13 witnesses before you.
- 14 MS. AUFDEMBERGE: And I would like to add this
- is a letter regarding the San Joaquin system, and we
- 16 went over that in great detail yesterday about whether
- 17 or not the San Joaquin system is relevant to this
- 18 hearing.
- 19 MS. MESERVE: I think my questions are a bit
- 20 more broad, actually, where I'm testing the ability of
- 21 the Bureau in this hearing -- the ability and intent of
- 22 the Bureau to comply with State Water Board
- 23 requirements, given the statements that have been made
- 24 in this recent letter which, although the subject
- 25 matter may be a standard that is in the San Joaquin

1 system, it makes some very broad statements regarding

- 2 the Water Board's ability to impose requirements on the
- 3 Bureau.
- 4 And we've been told throughout this hearing
- 5 that the Bureau would comply with all applicable
- 6 requirements. So that's why I'm bringing up this
- 7 issue.
- 8 CO-HEARING OFFICER DODUC: How are you tying
- 9 it specifically to 1143 or to something that is within
- 10 the scope of rebuttal testimony of this Part 2 Rebuttal
- 11 phase?
- 12 I understand we had this sort of discussion
- 13 yesterday, Ms. Meserve, and you will appreciate that,
- 14 as much as I don't make up the rules that govern these
- 15 proceedings, I must adhere to them. And one of the
- 16 rules is that the scope of rebuttal cross-examination
- 17 must be within the scope of rebuttal or, in this case,
- 18 we have identified that to be rebuttal testimony,
- 19 DWR-1143 2nd Revision or the Supplemental EIR/EIS.
- 20 MS. MESERVE: Correct. So the 1143, 2nd
- 21 Revised spends several pages on new criteria that are
- 22 proposed to be included in the proposed action and that
- 23 would likely become conditions that the Water Board
- 24 would impose in a permit granted, and then in addition,
- 25 it lists existing criteria that come from the Water

- 1 Board. So I believe 1143 includes this idea that the
- 2 Water Board has authority to impose requirements on the
- 3 Bureau. And if the Bureau's position is if that is not
- 4 true, then I think we all need to know about that.
- 5 CO-HEARING OFFICER DODUC: All right. Hold
- 6 on. Let me hear from Ms. Morris first, and then I will
- 7 get to you, Mr. Mizell.
- 8 MS. MORRIS: Thank you. Just a couple of
- 9 points. I would join the objections. This is beyond
- 10 the scope. This letter is dealing with water quality.
- 11 CO-HEARING OFFICER DODUC: I'm sorry,
- 12 Ms. Morris. When you say "beyond the scope," you are
- 13 saying beyond the scope of rebuttal?
- MS. MORRIS: Correct. And it's beyond the
- 15 scope of rebuttal. In addition, the water quality
- 16 control questions are different than what's in 1143.
- 17 1143 contains criteria related to Biological
- 18 Opinions, which are separate. And Ms. Meserve is
- 19 trying to conflate water -- what goes in water permits
- 20 versus water quality standards, which this letter
- 21 clearly is only talking about water quality standards
- 22 and the applicability to the federal government.
- 23 CO-HEARING OFFICER DODUC: Mr. Mizell,
- 24 anything to add?
- MR. MIZELL: Yeah, I'd like to add that, to

- 1 the question Ms. Meserve is asking, Ms. White has
- 2 already given a very direct answer. So I believe it's
- 3 asked and answered. Again, to the federal preemption
- 4 issue and what is raised by this, it's a legal
- 5 conclusion that does go beyond the scope of any of the
- 6 witnesses' testimony.
- 7 CO-HEARING OFFICER DODUC: Ms. Aufdemberge.
- 8 MS. AUFDEMBERGE: And I would just like to add
- 9 that this letter is also specifically pointed at
- 10 New Melones, and Ms. Meserve is painting with extremely
- 11 broad brushes about the meaning of the other statements
- 12 in this letter.
- 13 CO-HEARING OFFICER DODUC: Anyone else wanting
- 14 to weigh in?
- Ms. Meserve, last words?
- MS. MESERVE: Well, I mean, I think that, if
- 17 we look at the existing Delta criteria, the modeling
- 18 assumptions column on Page 7 is referring to D1641.
- 19 And, again, I think all the new criteria would likely
- 20 become part of a permit that would -- could be issued
- 21 by this Board.
- 22 So it's a very real concern about whether the
- 23 Bureau, as stated in this letter, may have the -- would
- 24 have the U.S. Attorney take action against the Water
- 25 Board rather than comply with requirements that the

- 1 Water Board had imposed for this project.
- 2 CO-HEARING OFFICER DODUC: All right,
- 3 Ms. Meserve, thank you.
- 4 Thank you all for your input.
- 5 As I said yesterday, this is outside of the
- 6 scope that we have framed for Part 2 Rebuttal and,
- 7 therefore, outside of the scope for cross-examination.
- 8 However, as I mentioned when Mr. Jackson
- 9 eloquently talked about this yesterday, you've
- 10 certainly raised an issue that we will be considering.
- 11 It is not appropriate for cross-examination during this
- 12 rebuttal phase, but we will give it some thought. We
- 13 will take it under consideration, and at some point, we
- 14 will be addressing it.
- But for now, the objections are sustained.
- 16 Please continue with your next line of
- 17 questioning, Ms. Meserve.
- MS. MESERVE: Thank you.
- 19 With respect to Ms. Parker's testimony on the
- 20 third paragraph of the first page, you refer to the
- 21 regulatory requirements -- let me see if can I get
- 22 there -- including its regulatory obligations, rather.
- 23 And my question is, if DWR 2nd Revised does
- 24 not account for the split between the CVP and the SWP,
- 25 as was discussed yesterday, how will DOI ensure that

- 1 the diversions in the proposed North Delta area are
- 2 within DOI's water rights permit limits?
- 3 MS. AUFDEMBERGE: Objection, beyond the scope
- 4 of -- who was that question for?
- 5 MS. MESERVE: It could be anyone. I had tried
- 6 to tie it to Ms. Parker's testimony. It's really an
- 7 1143 question.
- 8 CO-HEARING OFFICER DODUC: Help me understand
- 9 the question.
- 10 MS. MESERVE: Yesterday there was discussion
- 11 in the context of the float, the split. And Ms. Parker
- 12 was discussing the fact that the model doesn't care
- 13 where the water comes from.
- 14 And so my question is how to -- how does the
- 15 model or how would the project ensure that the
- 16 diversions are within the water rights permit limits of
- 17 the Bureau if there's no information in the model about
- 18 where that water is coming from.
- 19 CO-HEARING OFFICER DODUC: Ms. Parker.
- 20 MR. MIZELL: I'd like to also object.
- 21 The operations, day-to-day operations that
- 22 monitor the quantities of water and the places from
- 23 which that water is diverted are not a subject that's
- 24 before you with this rebuttal testimony. 1143 goes to
- 25 the operating criteria, which are conditions proposed

- on the project; it goes to modeling assumption as to
- 2 how the model interpreted those criteria; and it talks
- 3 about permit conditions from the fish agencies.
- In no form does it go into how the operations,
- 5 on a daily basis, account for the water that is
- 6 diverted from the existing projects or under the
- 7 California WaterFix.
- 8 CO-HEARING OFFICER DODUC: How does the
- 9 modeling account for it?
- 10 MR. MIZELL: Well, this goes to the float
- 11 issue. So the extent to which the model estimates --
- 12 CO-HEARING OFFICER DODUC: Are you testifying
- 13 or -- let me ask Mr. Reyes that.
- 14 MR. MIZELL: I'm explaining my objection. My
- objection is it's beyond the scope. I'm happy to
- 16 elaborate if you need it.
- 17 CO-HEARING OFFICER DODUC: It's not beyond the
- 18 scope because we're trying to understand what is
- 19 encompassed in 1143 and what isn't.
- 20 So Mr. Reyes or Dr. Chilmakuri, now that I
- 21 finally can say your last name, can one of you answer
- 22 that question?
- 23 WITNESS CHILMAKURI: The model is complying
- 24 with all the regulatory criteria, including the water
- 25 rights.

- 1 MS. MESERVE: So it's built in?
- 2 WITNESS CHILMAKURI: Yes.
- 3 MS. MESERVE: So does it include, then, a
- 4 maximum amount that can be diverted under a CVP label
- 5 in a given day?
- 6 WITNESS CHILMAKURI: In a month, yes.
- 7 MS. MESERVE: And is that -- do you know where
- 8 that reference would be if I wanted to follow up on
- 9 that?
- 10 WITNESS CHILMAKURI: What specifically were
- 11 you looking for?
- 12 MS. MESERVE: Where's that assumption in the
- 13 model so we could be assured that it's true that
- 14 there's some kind of limit in the model? Because the
- 15 discussion yesterday from Ms. Parker made me think
- 16 maybe there wasn't, and that's why I asked the
- 17 question.
- 18 WITNESS CHILMAKURI: You can look at the
- 19 Biological Assessment, Appendix 5A.
- MS. MESERVE: Of the Final EIR?
- 21 WITNESS CHILMAKURI: Biological Assessment.
- MS. MESERVE: Okay. Now, on 1143, both
- 23 Footnote 29 and 38 refer to changes under adaptive
- 24 management that we've discussed a little bit.
- Doesn't the ITP state that all criteria are

- 1 subject to change under adaptive management?
- 2 WITNESS CHILMAKURI: Could you point us to
- 3 that, please.
- 4 MS. MESERVE: So that would be in SWRCB-107,
- 5 top of Page 67.
- 6 CO-HEARING OFFICER DODUC: And your point in
- 7 asking this question relative to 1143 is?
- 8 MS. MESERVE: So the issue is that there are
- 9 two footnotes, one with respect to -- for an outflow
- 10 and one with respect to South Delta operations that
- 11 talk about changes under adaptive management. And my
- 12 questions go to the issue of what all is subject to
- 13 adaptive management.
- 14 CO-HEARING OFFICER DODUC: So you're asking
- 15 whether or not other criteria as proposed in 1143 might
- 16 also be subject to adaptive management?
- MS. MESERVE: Yes.
- 18 CO-HEARING OFFICER DODUC: Let's ask that
- 19 rather than pulling up the ITP again.
- MS. MESERVE: Okay. Yes.
- 21 So I guess, Dr. Chilmakuri, is it your
- 22 understanding that all the criteria in DWR-1143 2nd
- 23 Revised would be subject to change under adaptive
- 24 management?
- 25 WITNESS CHILMAKURI: Yes.

- 1 MS. MESERVE: So just to be clear, it's not
- 2 limited to South Delta operations and spring outflow?
- 3 WITNESS CHILMAKURI: That's my understanding,
- 4 that all the criteria are subject to adaptive
- 5 management. It's all-encompassing.
- 6 MS. MESERVE: So does DWR and the Bureau
- 7 intend to correct DWR 2nd Revised to reflect that more
- 8 clearly?
- 9 MR. MIZELL: Objection, argumentative.
- 10 DWR-1143 2nd revised applies to -- states
- 11 which criteria are currently considered within adaptive
- 12 management processes indicated in the fish agency
- 13 permits. I don't believe anywhere in 1143 it says that
- 14 that is exclusive.
- 15 CO-HEARING OFFICER DODUC: Dr. Chilmakuri,
- 16 your response to Ms. Meserve's question regarding
- 17 adaptive management -- adaptive management?
- 18 WITNESS CHILMAKURI: Could you state --
- 19 CO-HEARING OFFICER DODUC: Your understanding,
- 20 how is that reflected in 1143, Revised -- Revision 2?
- 21 WITNESS CHILMAKURI: It's -- there are -- as
- 22 Ms. Meserve pointed out, there are two footnotes that
- 23 are specific to -- to criteria. But as I understand
- 24 adaptive management -- and I'm in no means an expert on
- 25 adaptive management. But my understanding of it is it

- 1 encompasses everything. If the best available science
- 2 indicates a change is necessary, I think adaptive
- 3 management is the proper -- is providing a way to adapt
- 4 the criteria. And in my opinion, all the criteria are
- 5 subject to it.
- 6 CO-HEARING OFFICER DODUC: You've made your
- 7 point, Ms. Meserve.
- 8 MS. MESERVE: Okay.
- 9 Footnote 38 refers to the DFW concurrence and
- 10 coordination with Fish and Wildlife Service and NMFS
- 11 with respect to changes in spring outflow.
- 12 Is there any role for the State Water Board in
- 13 making a change to spring outflow requirements using
- 14 adaptive management?
- 15 WITNESS CHILMAKURI: Again, I'm not fully
- 16 familiar with the composition of the group who would
- 17 make those decisions, but you can follow up with
- 18 Mr. Earle -- or Dr. Earle, who is coming up in the next
- 19 panel.
- 20 MS. MESERVE: And just to be clear, we would
- 21 be permitted to ask Dr. Earle questions about DWR-1143
- 22 Revised?
- 23 CO-HEARING OFFICER DODUC: And the question
- 24 specifically was?
- MS. MESERVE: Whether there would be a role

- 1 for the State Water Board in making changes to spring
- 2 outflow requirements.
- 3 CO-HEARING OFFICER DODUC: How does that -- I
- 4 mean, that's a question with or without 1143.
- 5 MS. MESERVE: I mean, for me, it's related to
- 6 1143 because I noticed, like we've talked about --
- 7 usually in legal proceedings, we only put --
- 8 CO-HEARING OFFICER DODUC: Let me put it this
- 9 way, Ms. Meserve. That question, yes. I don't want to
- 10 open 1143 to everybody on Panel 3, so depending on the
- 11 circumstances.
- MS. MESERVE: Okay. Thank you.
- 13 Is anyone on this panel aware of any role for
- 14 the State Water Board in any other changes that may be
- 15 sought through the adaptive management process?
- 16 (No response)
- MS. MESERVE: There's no answer.
- 18 WITNESS WHITE: Well, can I add I think it
- 19 just depends on what it is that's changing. I mean, a
- 20 lot of these criteria are kind of overlapping with
- 21 other criteria that already exist. So I think it would
- 22 really depend on specifically what we're talking about.
- 23 But possibly Panel 3 would be able to expand on it
- 24 further.
- 25 MS. MESERVE: Okay. So if we could look at

- 1 Page 7 of 1143 Revised on the last row. And this is
- 2 looking at the export-to-inflow ratio. And it's
- 3 defined the Sacramento River flow as flows downstream
- 4 of the North Delta diversions such that the North Delta
- 5 diversions are not included in the calculation.
- 6 Doesn't this move the compliance point for
- 7 calculating inflow for export to inflow from Freeport
- 8 to downstream of the North Delta Diversions?
- 9 CO-HEARING OFFICER DODUC: Ms. Morris?
- 10 MS. MORRIS: Objection, misstates the
- 11 testimony. It doesn't say that it's moving compliance
- 12 points. It says specifically on there that they're --
- 13 they are requesting or suggesting, which is different
- 14 than saying they're moving the compliance point.
- 15 CO-HEARING OFFICER DODUC: All right. We'll
- 16 caveat it that way.
- 17 MR. BERLINER: I have another objection. This
- 18 was discussed extensively in Part 1. I believe Armin
- 19 Munevar attested at great length about the
- 20 export-import inflow ratio. So this has already been a
- 21 topic of cross-examination for quite --
- 22 CO-HEARING OFFICER DODUC: Thank you. I
- 23 recognize that, but now it's being asked in the context
- 24 of 1143.
- So, Ms. Meserve, please repeat the question,

- 1 noting the caveat that Ms. Morris reminded us of.
- 2 MS. MESERVE: Certainly. So this
- 3 export-to-inflow ratio that is listed under key
- 4 existing criteria of the table would actually be a
- 5 change from the current calculation of export-to-inflow
- 6 at Freeport, wouldn't it?
- 7 WITNESS CHILMAKURI: If you can bring up
- 8 D1641, I don't believe this is a change in how the
- 9 E-to-I ratio is calculated.
- 10 All we are saying is that the -- not the --
- 11 for Sacramento River inflow, the flow should be
- downstream of the intakes, given that there are other
- 13 predictive criteria for the entrainment, such as the
- 14 bypass flows for the North Delta Diversion and Old and
- 15 Middle River flow requirements for the South Delta
- 16 intakes.
- MS. MESERVE: And the ITP defines the Delta
- 18 inflow as including that water that goes down the Yolo
- 19 Bypass also, doesn't it?
- 20 WITNESS CHILMAKURI: Again, you have to show
- 21 me where and what context that was discussed or
- 22 defined.
- 23 MS. MESERVE: If we -- if we need to go to the
- 24 ITP, that's SWRCB-107, Page 181. And on that page, it
- 25 states that the Delta inflow is defined as the sum of

- 1 the Sacramento River flow downstream of the North Delta
- 2 intakes, and the Yolo Bypass flow is included there.
- 3 At the bottom of the page, yes.
- 4 Do you see that?
- 5 WITNESS CHILMAKURI: Yes. That is the
- 6 existing definition of the inflow in 1641, I believe.
- 7 MS. MESERVE: Right. So are you aware that,
- 8 under implementation of the RPAs for the 2009
- 9 Biological Opinion, that it is proposed for more water
- 10 to be put down the Yolo Bypass than currently goes down
- 11 the Yolo Bypass?
- MR. MIZELL: Objection.
- 13 CO-HEARING OFFICER DODUC: Mr. Mizell.
- 14 MR. MIZELL: Beyond the scope of the testimony
- in 1143 and the Supplemental.
- 16 CO-HEARING OFFICER DODUC: So link it back to
- 17 1143, Ms. Meserve.
- 18 MS. MESERVE: Well, I'm focusing on the
- 19 export-to-inflow ratio.
- 20 CO-HEARING OFFICER DODUC: Yes, but that
- 21 question...
- 22 MS. MESERVE: And digging into that, using the
- 23 ITP, it's assuming that also downstream of the North
- 24 Delta Diversions would be any water that went down the
- 25 Yolo Bypass. And so I want to ask Dr. Chilmakuri or

- 1 Mr. Reyes about whether the model accounts for the
- 2 increased flows down the Yolo Bypass that are going to
- 3 occur under implementation of the 2009 Biological
- 4 Opinion requirements.
- 5 CO-HEARING OFFICER DODUC: How does that tie
- 6 back to 1143?
- 7 MS. MESERVE: Because 1143 lists these adopted
- 8 project criteria in the modeling assumptions, and my
- 9 questions go to whether the modeling assumptions
- 10 include that increase in flow down the Yolo Bypass,
- 11 which is well underway.
- 12 CO-HEARING OFFICER DODUC: As depicted in 1143
- 13 as a proposed criterion?
- MS. MESERVE: Yes.
- 15 CO-HEARING OFFICER DODUC: Okay. Ms. Morris.
- MS. MORRIS: I would just like to add the
- 17 objection that this has been asked and answered, that
- 18 the criteria for this export-inflow ratio has not
- 19 changed throughout the proceedings. So there has been
- 20 no change from what's in 1143 as to what Mr. Munevar
- 21 already testified to and explained to you in Part 1.
- 22 CO-HEARING OFFICER DODUC: I understand. But
- 23 one of the purposes of 1143 is to help all of us better
- 24 understand the complexity of what's being proposed,
- 25 especially the operating criteria and the modeling

1 assumptions. So I'm going to give her a little bit of

- 2 leeway on that.
- 3 Please answer. It's not like she's reopening
- 4 everything in Part 1. So this is an important point.
- 5 Dr. Chilmakuri.
- 6 WITNESS CHILMAKURI: The No Action and the
- 7 WaterFix modeling that was kind of presented to you in
- 8 this hearing both include a change to the existing
- 9 Fremont Weir. It assumes there would be a new notch
- 10 and that there would be higher flows that -- going into
- 11 Yolo Bypass through that notch at lower Sacramento
- 12 River flows. So the modeling includes that, a
- 13 representation of the action that's being considered.
- I wouldn't say that the action that was
- included in the modeling is exactly the proposed action
- 16 for that project. I don't know the proposed action
- 17 exactly. As far as -- we have a representation of that
- 18 project in our modeling.
- 19 MS. MESERVE: Isn't it true, Dr. Chilmakuri,
- 20 that the modeling assumes only up to 6,000 cfs going
- 21 through the Yolo Bypass?
- 22 CO-HEARING OFFICER DODUC: Ms. Morris.
- 23 MS. MORRIS: It's vague and ambiguous as to
- 24 the time or the -- I mean, that could differ. So if
- 25 she could be specific as to what time frame she's

- 1 asking about, that would be helpful.
- 2 CO-HEARING OFFICER DODUC: Ms. Meserve.
- 3 MS. MESERVE: I'm trying to avoid bringing up
- 4 a lot of documents here.
- 5 Period of inundation in the modeling, doesn't
- 6 it include December 1st through April 30th, maximum of
- 7 6,000 cfs?
- 8 WITNESS CHILMAKURI: That's through the notch,
- 9 and the -- the water would spill over, under -- over
- 10 the current weir still. So if there is sufficient flow
- in the river, the spills would be much greater than
- 12 6,000. The 6,000 is only to the -- it's the limit to
- 13 the amount of flow that would be allowed through the
- 14 notch.
- MS. MESERVE: Isn't it true that the Yolo
- 16 Bypass project is considering a flow up to 12,000 cfs
- 17 over a longer time period?
- 18 WITNESS CHILMAKURI: I don't know.
- 19 MS. MESERVE: Are you aware of whether the
- 20 modeling attempted to track the development of the
- 21 implementation of this portion of the NMFS Biological
- 22 Opinion?
- 23 WITNESS CHILMAKURI: Yes, I would agree. I
- 24 would say that we were attempting to include a
- 25 representation of that action from the NMFS Biological

- 1 Opinion. However, as far as I know, the Yolo Bypass
- 2 process, I believe they just released their Draft EIR
- 3 earlier this year or late last year. So we were much
- 4 far ahead with respect to WaterFix, and we had to make
- 5 an assumption as to what that action would be. And
- 6 let's just say that this assumption was developed in
- 7 coordination with the fish agencies within the WaterFix
- 8 context.
- 9 MS. MESERVE: But it's possible that the
- 10 amount of flow going through the Yolo Bypass could be
- 11 higher than was assumed in the modeling; isn't that
- 12 correct?
- MS. MORRIS: Objection, calls for speculation.
- 14 CO-HEARING OFFICER DODUC: And now you're
- 15 getting into way, way details that are beyond the scope
- 16 of 1143, Ms. Meserve.
- 17 MS. MESERVE: The reason why I'm asking these
- 18 questions goes back to the water rights questions
- 19 because, if the water quality is different in the
- 20 modeling outputs than is likely under the
- 21 implementation of a requirement of the 2009 Biological
- 22 Opinion, that will affect water quality for all the
- 23 water users downstream of the Yolo Bypass.
- 24 CO-HEARING OFFICER DODUC: I appreciate that,
- but that is beyond, 1143 and it's also not in anyone's

- 1 rebuttal testimony. And I don't think it's part of the
- 2 change in the EIR Supplemental. So you have exhausted
- 3 the three options here.
- 4 MS. MESERVE: Although the relationship I did
- 5 think of with respect to the Supplemental EIR is that
- 6 both the water quality -- the water supply and the
- 7 Chapters 5 and 6 include no further discussion,
- 8 including of cumulative impacts.
- 9 And in the time period since the certification
- 10 of the Final EIR, there has been more certainty about
- 11 the -- moving forward of this Yolo Bypass project. And
- 12 so I believe --
- 13 CO-HEARING OFFICER DODUC: That's still
- 14 outside the scope.
- 15 MS. MESERVE: I thought we were able to ask
- 16 questions about the Supplemental EIR. And my
- 17 question --
- 18 CO-HEARING OFFICER DODUC: And the changes as
- 19 reflected in the footprint.
- 20 MS. MESERVE: I think my question goes to
- 21 whether there should have been a revised cumulative
- 22 impact analysis, given the moving forward of the Yolo
- 23 Bypass project.
- 24 CO-HEARING OFFICER DODUC: Outside the scope.
- Ms. Womack.

- 1 MS. WOMACK: I would concur with Ms. Meserve.
- 2 Our impact of water quality since we're now put -- now
- 3 that our ranch is not being taken, our water quality,
- 4 we worry about a great deal and all of the impacts from
- 5 all of the things. So I would appreciate having more
- 6 details about the water quality.
- 7 There wasn't much in the supplemental that I
- 8 could glean that was going to -- how it was going to
- 9 change -- you know, improve my water quality.
- 10 Water -- my -- I am a licensed, you know, user
- 11 of water, a legal user of water. And my water quality
- 12 is -- I haven't seen where I'm assured that my water
- 13 quality is not going to suffer.
- So I appreciate Ms. Meserve's questioning.
- 15 CO-HEARING OFFICER DODUC: Your appreciation
- 16 is noted. However, it is still outside the scope of
- 17 rebuttal cross-examination. Okay.
- MS. MESERVE: I'm going to move on to some
- 19 questions about the regulatory requirements in
- 20 DWR-1143.
- 21 If we could -- for -- I believe, Ms. Parker,
- 22 the San Luis rule curve that you discuss in your
- 23 testimony, it reflects a discretionary element of
- 24 project operations, doesn't it?
- 25 CO-HEARING OFFICER DODUC: Before you object,

- 1 Ms. Aufdemberge -- I know we've been through this. So
- 2 I'm sure Ms. Meserve has a point that she'll get to
- 3 very quickly.
- 4 WITNESS PARKER: Would you please tell me
- 5 where in my testimony you're looking? Remind me of
- 6 that.
- 7 CO-HEARING OFFICER DODUC: I think it was more
- 8 in your response to cross-exam rather than your
- 9 testimony, as I remember it.
- 10 WITNESS PARKER: I'm sorry. Would you refresh
- 11 my memory as to my comment?
- 12 MS. MESERVE: I believe that it was discussed
- 13 that the rule -- the San Luis rule curve is a
- 14 discretionary element of the project operations for the
- 15 Bureau.
- 16 WITNESS PARKER: Okay. I remember that now.
- 17 So please repeat your question.
- 18 MS. MESERVE: Just that it is a discretionary
- 19 element. I'm just --
- 20 CO-HEARING OFFICER DODUC: Asked and answered.
- 21 Your next question.
- MS. MESERVE: And so that relates to moving
- 23 water from north to south.
- 24 WITNESS PARKER: The rule curve is a model
- 25 mechanism that governs how the model moves water from

- 1 north to south. It's not a -- an explicit
- 2 representation of Central Valley operations, actual
- 3 real-time operations.
- 4 MS. MESERVE: Okay. I'd like to put up an
- 5 exhibit, FSL-60. This is a letter of interest in
- 6 funding regarding WIFIA, and I'm specifically referring
- 7 to Page 23 of that document. And I have paper copies
- 8 that I can supply for some of the witnesses.
- 9 CO-HEARING OFFICER DODUC: What is WIFIA?
- 10 MS. MESERVE: The Water Infrastructure
- 11 Financing program.
- 12 CO-HEARING OFFICER DODUC: Ms. Morris.
- 13 MS. MORRIS: I would just object that this
- 14 document is outside the scope. This has to deal with a
- 15 letter of intent that's submitted by a finance GPA,
- 16 none of which is --
- 17 CO-HEARING OFFICER DODUC: Ms. Morris, I don't
- 18 know yet what her intent is to bring this up. So let's
- 19 let her ask the question, and then I will listen to any
- 20 objections.
- 21 MS. MESERVE: Okay. So I'm looking at the
- 22 third paragraph on Page 23. If -- if Ms. Parker
- 23 could -- and Ms. White could take a look at that
- 24 paragraph, that discusses an agreement being
- 25 negotiated.

- 1 CO-HEARING OFFICER DODUC: And make the
- 2 linkage for me, Ms. Meserve, in terms of how this
- 3 relates to either their rebuttal testimony, 1143, or
- 4 the Supplemental EIR.
- 5 MS. MESERVE. I think the relationship is that
- 6 this is -- has to do with the model logic that was in
- 7 1143 and omitted from 1143, so -- such as the rule
- 8 curve and setting the export allocations. So we're
- 9 trying to look at what the operational discretion is
- 10 going to be in this project. Back to our issue of
- 11 what's included in 1143 and what's not, I think this is
- 12 an example of something that's not included in 1143
- 13 that appears to bear on the operations.
- 14 CO-HEARING OFFICER DODUC: Okay.
- MR. MIZELL: I'd like to object as to the
- 16 assertion Ms. Meserve is making, that a financing GPA
- 17 proposal that we have no knowledge as to whether or not
- 18 it's been accepted or incorporated into the project has
- 19 absolutely no bearing on what the existing rule curve
- 20 assumptions are in the modeling.
- 21 CO-HEARING OFFICER DODUC: Ms. Morris.
- 22 MS. MORRIS: And I would object as this lacks
- 23 foundation. There's no basis. There's been no showing
- 24 that these witnesses are familiar with provided
- 25 information or that that statement is, in fact, based

- 1 on any modeling.
- 2 CO-HEARING OFFICER DODUC: Everyone just hold
- 3 on.
- 4 Ms. Meserve, what is your question?
- 5 MS. MESERVE: My questions have do with
- 6 whether the DOI witnesses or others on the panel are
- 7 familiar with the agreement referenced here.
- 8 CO-HEARING OFFICER DODUC: All right. Anyone?
- 9 Ms. Morris.
- 10 MS. MORRIS: I would object on the basis
- 11 that -- to the extent any of the discussion regarding
- 12 this agreement are confidential.
- 13 CO-HEARING OFFICER DODUC: Okay. We won't get
- 14 into confidential matters.
- MS. MESERVE: This is a public document.
- 16 CO-HEARING OFFICER DODUC: Again, is anyone
- 17 familiar with this document and this. . .
- 18 WITNESS WHITE: I have never seen this
- 19 document.
- 20 WITNESS REYES: I'm not familiar with it, no.
- 21 WITNESS CHILMAKURI: Me neither.
- 22 WITNESS PARKER: I'm not familiar with it.
- 23 CO-HEARING OFFICER DODUC: All right.
- 24 Ms. Meserve, it doesn't seem like anyone is familiar
- 25 with it.

- 1 Mr. Bezerra.
- 2 MR. BEZERRA: I think the question actually
- 3 was whether any of the witnesses are familiar with the
- 4 ongoing negotiation between DWR and Reclamation that's
- 5 described here.
- 6 And I believe at least Ms. Parker, in the
- 7 past, has previously stated she is familiar with that.
- 8 And I believe in her previous cross-examination
- 9 responses, she stated that the results of that could
- 10 affect how operational discretion is exercised in
- 11 relation to WaterFix.
- 12 CO-HEARING OFFICER DODUC: Yes, but this
- 13 specific document references financing.
- MS. MESERVE: Well, yes. The questions don't
- 15 refer to financing. They refer to an agreement that is
- 16 establishing, apparently, criteria -- new criteria
- 17 about avoiding impacts to CVP water operations.
- 18 So again, back to 1143, we're trying to
- 19 understand whether 1143 really represents the entirety
- 20 of the requirements that this project is proposing to
- 21 meet.
- 22 MR. MIZELL: And I'd object as mis- --
- 23 CO-HEARING OFFICER DODUC: So to your
- 24 knowledge, people sitting there, does 1143 reflect all
- 25 the operational criteria being proposed by the

- 1 projects?
- 2 MR. MIZELL: Hearing Officer Doduc, I'd like
- 3 to be very clear with the answers the witnesses will
- 4 give to your question as we want you to have all the
- 5 information that you are seeking. However, they've all
- 6 indicated they have no knowledge of this document.
- 7 It will be extremely hard for them to answer
- 8 without speculating as to whether or not specifics
- 9 contained in a document they're unaware of are
- 10 contained in the model.
- 11 CO-HEARING OFFICER DODUC: Understood.
- 12 Ms. Taber, you've been jumping up and down.
- 13 MS. TABER: I just want to make sure I
- 14 understand, when we're talking about this document and
- 15 the witness's familiarity with this document, if
- 16 Mr. Mizell is referring to the document on the screen
- 17 or the agreement referenced in that document.
- 18 It's my understanding that Ms. Meserve's
- 19 questions go to their familiarity with the agreement
- 20 that is -- DWR has represented in this document as
- 21 being negotiated. And so I'm not sure that we're all
- 22 talking about the same document.
- 23 CO-HEARING OFFICER DODUC: All right.
- 24 MS. TABER: Maybe Ms. Meserve could make that
- 25 clear.

- 1 CO-HEARING OFFICER DODUC: Ms. Meserve,
- 2 actually, what is your question? I appreciate that
- 3 counsels have the right to object and others have the
- 4 right to jump in, but it does confuse the matter when
- 5 I'm trying to understand the point you are trying to
- 6 get at, Ms. Meserve.
- 7 MS. MESERVE: Right. Well, I mean, I think in
- 8 general I'm trying to understand how to square the
- 9 statements in this document and the discussions that
- 10 appear to be underway according to the representations
- 11 in this document, and --
- 12 CO-HEARING OFFICER DODUC: Okay. Stop, stop,
- 13 stop. When you say "this document," you mean?
- 14 MS. MESERVE: FSL-60, which is the WIFIA loan
- 15 application --
- 16 CO-HEARING OFFICER DODUC: Okay.
- 17 MS. MESERVE: -- is referring to a
- 18 negotiation.
- 19 CO-HEARING OFFICER DODUC: Okay. Go on.
- 20 MS MESERVE: And then I'm trying to understand
- 21 what the status of that negotiation is.
- 22 CO-HEARING OFFICER DODUC: When you say "that
- 23 negotiation, " are you referring to the financing aspect
- 24 of that negotiation?
- MS. MESERVE: No. The WIFIA application

- 1 discusses an agreement being negotiated that would
- 2 establish criteria to avoid possible impacts to CVP.
- 3 CO-HEARING OFFICER DODUC: And where is that?
- 4 MS. MESERVE: That's at the bottom of the
- 5 screen, that full paragraph.
- 6 CO-HEARING OFFICER DODUC: Okay.
- 7 MS. MESERVE: So going back to the questions,
- 8 do the witnesses know who is involved in negotiating
- 9 this agreement?
- 10 MR. BERLINER: Objection. That's a different
- 11 question.
- 12 CO-HEARING OFFICER DODUC: Then let's hear the
- 13 answer.
- MR. BERLINER: In that case, object as to
- 15 relevance.
- 16 CO-HEARING OFFICER DODUC: I think Ms. Meserve
- 17 has established that she's trying to make the linkage,
- 18 and let's see if there is a linkage to be made.
- 19 MR. MIZELL: I'd also like to object based
- 20 upon the fact that what Ms. Meserve is referencing in
- 21 this document seems to reference ongoing COA
- 22 negotiations. COA has been thoroughly discussed or,
- 23 I'd say, asked and answered.
- MS. MESERVE: I think in the context of COA,
- 25 though, we've been discussing it in terms of something

1 that's already said. And this is introducing a concept

- 2 that's --
- 3 CO-HEARING OFFICER DODUC: So, Ms. Meserve, I
- 4 appreciate where you are trying to go, but I, one,
- 5 question whether there is value in pursuing it with
- 6 these witnesses who don't seem very familiar with the
- 7 specifics that are being negotiated and also, because
- 8 it is under negotiation, it's subject to change.
- 9 So where is the value in us trying to
- 10 understand this particular phase of negotiations?
- 11 MS. MESERVE: Well, I think what we're
- 12 interested in knowing is what kinds of impacts to the
- 13 CVP this document is referring to avoiding and then how
- 14 that would affect operations.
- 15 CO-HEARING OFFICER DODUC: Well, one, these
- 16 witnesses are not familiar with this document and the
- 17 statement about things being avoided. And, second,
- 18 because the negotiations are still ongoing and not yet
- 19 concluded, how would they or we, sitting here today,
- 20 determine what the impacts might be?
- 21 MS. MESERVE: Well, I think part of the record
- 22 I want to create is that it doesn't appear that there's
- 23 a set project with respect to the CVP at least.
- 24 CO-HEARING OFFICER DODUC: So is your point,
- 25 then, that 1143 is subject to change based on what

- 1 is -- or potentially could be changed based on the
- 2 outcome of the agreements being discussed here?
- 3 MS. MESERVE: Correct.
- 4 CO-HEARING OFFICER DODUC: And I think we've
- 5 got that, and I think you've made that point and it's
- 6 in the record.
- 7 MS. MESERVE: I didn't quite catch -- I heard
- 8 the witnesses answer that they were not familiar with
- 9 this particular document, and I think the part that
- 10 maybe I missed in the answer was whether they were
- 11 involved in the discussions about the impacts to the
- 12 CVP that are references in the document.
- 13 CO-HEARING OFFICER DODUC: Let's get this over
- 14 with.
- Mr. Bezerra.
- 16 MR. BEZERRA: Just a quick point. I think
- 17 it's a fairly simple subject. It's how much of this
- 18 project is outside of the regulatory requirements that
- 19 are described in 1143. What else is subject to the
- 20 petitioners' discretion?
- 21 CO-HEARING OFFICER DODUC: Yes, and you all
- 22 may make that point in your closing briefs, but it's
- 23 not something that can be resolved with these witnesses
- 24 and during this scope of -- the scope of this
- 25 cross-examination.

- 1 Mr. Jackson.
- 2 MR. JACKSON: Yes, the point that I think is
- 3 relevant here is that the material that is required
- 4 under your regulations to be in the permit is still not
- 5 -- according this document, is still not in final form.
- 6 This -- all the way through this, we've been
- 7 responding, you've been allowing the prove-up of the
- 8 material that should have been in the petition to start
- 9 the hearing so that we knew what was inside the
- 10 operational criteria that they're relying on and what
- 11 was outside. And we still don't know.
- 12 CO-HEARING OFFICER DODUC: And that is an
- 13 argument we've heard before.
- 14 MR. JACKSON: It would be helpful if we could
- 15 ask questions that are related to -- I don't know what
- 16 they mean by "currently." There's only one contractual
- 17 arrangement that might affect operation of the
- 18 WaterFix.
- 19 CO-HEARING OFFICER DODUC: And since these
- 20 witnesses are not familiar with this document, they
- 21 cannot possibly answer that question. Next.
- 22 MS. DES JARDINS: I would just like to say
- 23 that I did make -- citing the example in Decision 990,
- 24 which was when the first coordinated operating
- 25 agreement was made, it's absolutely fundamental to the

- 1 agreement between the projects how they share unstored
- 2 water given the -- given that the Bureau's petition
- 3 assumed the entire unimpaired flow of the Feather River
- 4 and DWR's application also assumed that there's some
- 5 fundamental agreement about both sharing of shortages
- 6 and obligation for in-basin --
- 7 CO-HEARING OFFICER DODUC: And your point is?
- 8 Because you surely are not testifying.
- 9 MS. DES JARDINS: My point is I would like to
- 10 get it on request [sic] that I made that as a request
- and that the Hearing Officers follow the example in
- 12 Decision 990 and recess the hearing until an agreement
- 13 was made.
- 14 This agreement shows how difficult it is to
- 15 get any details on what is going to be absolutely
- 16 fundamental to whether the water quality plan
- 17 requirements are met in the future.
- 18 CO-HEARING OFFICER DODUC: We have received,
- 19 considered numerous motions to wait until things are
- 20 further developed. Our ruling stands on that. Your
- 21 request is denied.
- Ms. Morris.
- 23 MS. MORRIS: Mine is an objection to the
- 24 question that was just revised. And that is to the
- 25 extent that it calls for a confidential settlement

- 1 discussion as well as speculative as this document
- 2 clearly says "may impact" --
- 3 CO-HEARING OFFICER DODUC: Understood.
- 4 MS. MORRIS: And it says "if any" --
- 5 But the question was revised. Sorry.
- 6 Apologize.
- 7 CO-HEARING OFFICER DODUC: Ms. Meserve, there
- 8 is no further value to be added by this. Move on.
- 9 Your point, if it was the point, that 1143 is
- 10 subject to change depending on a lot of things,
- 11 including adaptive management, including ongoing
- 12 negotiations on the COA and other agreements is noted.
- 13 MS. MESERVE: And so am I permitted to ask the
- 14 witnesses whether they agree that the -- that the
- 15 operations may be changed based on the discussions
- 16 about avoiding impacts to CVP, or am I permitted to ask
- 17 no further questions regarding this?
- 18 CO-HEARING OFFICER DODUC: I think you will
- 19 get an objection about the phrasing of that question,
- 20 so let's not go there.
- 21 But I think -- would anyone on the panel --
- 22 well, actually, I will request all or anyone on the
- 23 panel to state whether or not your understanding, which
- 24 I think at least Dr. Chilmakuri has already stated,
- 25 that the criteria being proposed in 1143 is subject to

- 1 change pending a variety of other factors. Does anyone
- 2 disagree with that?
- 3 WITNESS CHILMAKURI: I just said -- I want to
- 4 be clear. My testimony was the criteria in 1143 was
- 5 subject to change under Adaptive Management Plan. I
- 6 didn't say there was anything else that's going to
- 7 affect.
- 8 CO-HEARING OFFICER DODUC: So is it your
- 9 testimony that, to your knowledge, no other factors may
- 10 impact the proposed criteria in 1143 except adaptive
- 11 management?
- 12 WITNESS CHILMAKURI: That I'm aware of, yes.
- 13 CO-HEARING OFFICER DODUC: Okay. I stand
- 14 corrected.
- 15 MS. MESERVE: I would be interested in the
- 16 Bureau witnesses' response to your question.
- 17 CO-HEARING OFFICER DODUC: Ms. White,
- 18 Ms. Parker?
- 19 WITNESS WHITE: I think it's hard to -- I
- 20 agree with Dr. Chilmakuri. Biological Opinions are
- 21 always subject to change based on the trigger
- 22 conditions. So it's difficult to say that nothing else
- 23 could change this.
- I think we, in our Biological Opinion for Fish
- 25 and Wildlife Service, there's already an expectation to

- 1 consult. So I would imagine those also would have
- 2 potential to change some of the operating criteria.
- 3 MS. MESERVE: But the discussions about
- 4 avoiding impacts to CVP could also change the operating
- 5 criteria as well, couldn't they?
- 6 CO-HEARING OFFICER DODUC: No. They have
- 7 testified -- I mean "no," I'm not answering for them.
- 8 I'm answering -- I'm telling you no, that we've gone
- 9 down this path. They are not familiar with this
- 10 document, this negotiation, whatever the underlying
- 11 purpose is for what's being reflected in this document
- 12 that they have not seen. So we are not going to go
- 13 there, and you are out of time.
- MS. MESERVE: Yes, but I think -- I don't
- 15 think the Bureau witnesses ever agreed with your
- 16 statement that they're not familiar --
- 17 CO-HEARING OFFICER DODUC: They don't have
- 18 to --
- MS. MESERVE: Wait a minute. Just to be
- 20 clear, they said they weren't familiar this the
- 21 document. They did not say they were not familiar with
- 22 the negotiations.
- 23 CO-HEARING OFFICER DODUC: Are you familiar
- 24 with the negotiations described in this document that
- 25 you've not seen before?

- 1 WITNESS WHITE: I'm not really familiar with
- 2 what this document is stating, so it's hard for me to
- 3 answer that. I guess I can say I'm generally aware
- 4 there's discussions going on between Reclamation and
- 5 DWR. That's been testified to numerous times.
- 6 I'm not a negotiator for the Department or for
- 7 Reclamation, so. . .
- 8 MS. MESERVE: That concludes my questions.
- 9 Thank you.
- 10 MR. MIZELL: Hearing Officer Doduc, I'd like
- 11 to make a legal clarification. You have the answers of
- 12 the witnesses as to what is subject to change.
- 13 As a legal matter, as the attorney for the
- 14 Department here, I need to assert as well that we
- 15 recognize the continuing jurisdiction of the State
- 16 Water Board. And as we've said in our filings, we are
- 17 subject to your ongoing authority and any changes that
- 18 may come out of that.
- 19 CO-HEARING OFFICER DODUC: All right.
- Thank you, Ms. Meserve.
- 21 Any redirect, Mr. Mizell?
- MR. MIZELL: No redirect.
- 23 CO-HEARING OFFICER DODUC: What I would like
- 24 to do before you all leave is take a break. And when
- 25 we come back we, the Hearing Officers, the Hearing

1 Team, may have questions for you. So don't leave just

- 2 yet. We will return at 10:45.
- 3 (Recess taken)
- 4 CO-HEARING OFFICER DODUC: Okay. Everyone
- 5 please take a seat. It is 10:45. We are back. And we
- 6 have some questions for these witnesses.
- 7 And we'll begin with Mr. Deeringer.
- 8 MR. DEERINGER: Good morning, everybody.
- 9 In advance, I just want to apologize in case
- 10 this question ends up treading on some ground that
- 11 we've already covered. I think you heard Hearing
- 12 Officer Doduc acknowledge this is a pretty complex
- 13 hearing, and we're all just trying to understand it.
- 14 So our reading of the October-November OMR
- 15 flow criteria is that, as was mentioned yesterday,
- 16 they're going to be determined based on real-time
- 17 operations and protection of the D1641 San Joaquin
- 18 two-week pulse.
- 19 And we're curious what the modeling
- 20 assumptions were. Those are the operating criteria as
- 21 we read them. We're curious what the modeling
- 22 assumptions were for October-November OMR flow.
- 23 WITNESS CHILAMKURI: There is no OMR
- 24 restriction in the WaterFix or the No Action models.
- 25 MR. DEERINGER: Okay. Thank you.

- 1 CO-HEARING OFFICER DODUC: Let's make the
- 2 lawyer ask engineering questions.
- 3 MR. DEERINGER: That was a great lead in.
- 4 So the last bullet on the South -- excuse me
- 5 one second. I believe it's the last -- could we pull
- 6 up DWR-1143 2nd Revision, please?
- 7 Great. Thank you.
- 8 In the months of July, August, and September,
- 9 it appears that the OMR flow constraints were
- 10 suggested. Did you have any limits supposed in the
- 11 modeling?
- 12 WITNESS CHILAMKURI: No.
- 13 MR. DEERINGER: Okay. Great.
- 14 CO-HEARING OFFICER DODUC: This is my favorite
- 15 question, so I get to ask it.
- 16 Have you analyzed the effects of the two
- 17 different E-to-I ratio calculations for water supply
- 18 and Delta outflow?
- 19 WITNESS CHILAMKURI: Yes. It was presented in
- 20 Part 1, actually.
- 21 CO-HEARING OFFICER DODUC: And remind me how
- 22 the results were.
- 23 WITNESS CHILAMKURI: In general -- I'm talking
- 24 from my memory right now. But in most months it should
- 25 not differ, the outflows or the exports.

1 The changes -- main changes that are in June

- 2 months -- a majority of changes are in June; there were
- 3 some years where it was also changing operations in
- 4 May. And the effect is that there are increased
- 5 exports if we did not include the North Delta Diversion
- 6 as part of the EI calculation in June. But there is a
- 7 corresponding change in the subsequent months as to
- 8 whether exports would go down relatively.
- 9 So, but overall, though, in long -- when you
- 10 look at the long-term average exports, there is a very
- 11 minimal change. That's what I remember.
- 12 CO-HEARING OFFICER DODUC: Your question?
- 13 CO-HEARING OFFICER MARCUS: Yes. This one may
- 14 be the most general of all, at a higher level. And it
- 15 may be -- just forgive me for having to ask it.
- Part of the reason we asked for this is you
- 17 all know this so well; it's in your head, and you have
- 18 the expectation of how you do things, whether it's the
- 19 modeling assumptions or how real-time operations work.
- 20 And you've done a nice job explaining in the real world
- 21 how that might happen.
- 22 But there are modeling assumptions -- you'll
- 23 remember from Part 1 -- modeling assumptions about how
- 24 you would operate, operating assumptions that
- 25 Mr. Leahigh testified to, say, for how you would

- 1 operate the system largely when you have a year in
- 2 excess and have -- there's a lot of flows.
- 3 Are those -- are there any of the modeling
- 4 assumptions that you were talking about and assumptions
- 5 about operations that aren't operating criteria? I'm
- 6 not suggesting they all should be, but we have to
- 7 consider ultimately, as we go through this process --
- 8 there will be a lot more discussion and argument all of
- 9 that before we close. Folks are going to be arguing to
- 10 us which things we need to add conditions on.
- 11 And it's not to say we're going to button it
- 12 up into, like, "here's what you do every minute"
- 13 because that's just not possible. So I'm looking at
- 14 that broader scale area, sort of the difference between
- 15 how you say you've modeled and you'd operate, and then
- 16 there's how, for example, Mr. Bourez says you could
- 17 operate.
- 18 And I'm just looking for where, in here, it
- 19 may constrain you somewhat or not at all, to what the
- 20 modeling assumption were. I'm just picking the Sac
- 21 Valley issue because we spent a lot of time on that.
- 22 So is there anything really big in the
- 23 modeling assumptions that's not seen here? Again, I'm
- 24 not saying there should be or shouldn't be. I just
- 25 want to -- we just need to understand how to parse that

- 1 out. And, I'm sorry, I'm looking -- anybody can
- 2 answer. I assumed Dr. Chilmakuri --
- 3 WITNESS CHILAMKURI: Yeah, I can start, and
- 4 please add as -- I think, I mean, again, we talked
- 5 about this at length, as you said.
- 6 The -- in my opinion, the San Luis rule curve
- 7 and the export estimate that Sac Valley Users keep
- 8 bringing up, the changes or lack of changes that were
- 9 between the two scenarios, the No Action and the
- 10 WaterFix scenario, do not raise up to the level to be
- 11 included in the DWR-1143 2nd Revision.
- 12 The reason for my opinion is that the -- with
- 13 or without WaterFix, the projects are required to
- 14 operate to the many, many, many, regulatory
- 15 requirements which control their releases, their
- 16 storages. And they do have -- once they meet those
- 17 requirements, they do have discretion to use their
- 18 water available to meet other obligations, and that's
- 19 not changing with WaterFix or not.
- 20 What WaterFix brings in is a flexibility as to
- 21 when and where the water could be taken in the Delta
- 22 and nothing beyond. They're both -- working in the
- 23 WaterFix, the projects still can be engineered to be
- 24 required to operate to all the different requirements.
- 25 So therefore, it is my opinion that the rule

- 1 curve or the export estimate assumptions being made in
- 2 WaterFix modeling are reasonable and representative of
- 3 what the operation philosophy is of the projects.
- 4 WITNESS PARKER: I'll add just a little bit to
- 5 what Dr. Chilmakuri said.
- 6 My understanding is that the criteria that are
- 7 detailed in DWR-1143 2nd Revision are exactly that.
- 8 They're operating criteria.
- 9 Your question, Chair Marcus, was about whether
- 10 that was modeling criteria that was also operating
- 11 criteria. To my knowledge, there are not elements in
- 12 DWR-1143 2nd Revision that are -- that are not
- 13 operating criteria.
- 14 There are many, many, other criteria in the
- 15 model that are not operating criteria. And that's what
- 16 Dr. Chilmakuri was just talking about.
- 17 CO-HEARING OFFICER MARCUS: As to why they
- 18 don't need to be operating criteria in particular?
- 19 WITNESS PARKER: Right. And so why they
- 20 didn't belong.
- 21 CO-HEARING OFFICER MARCUS: Thank you. What
- 22 I'm trying to focus -- there will be legal argument on
- 23 all of this, and there will be proposed conditions.
- 24 I'm just trying to sort it out because I think people,
- 25 understandably, either because they may -- it's

- 1 complicated or because they have a point of view that
- 2 it's all getting -- what I'm trying to do is separate
- 3 it out in the hopes that we get to more focused -- the
- 4 more focused arguments we are going to see later on.
- 5 CO-HEARING OFFICER DODUC: So let me follow up
- 6 on what you just said Ms. Parker. Those modeling
- 7 criteria that are not operational criteria, are any of
- 8 them limiting factors in the modeling analysis that
- 9 would have an impact on the results that have been
- 10 presented during this hearing? Are any of those the
- 11 driving factor, the limiting factor in the various
- 12 calculations and analyses but are not presented in 1143
- 13 as an operational criteria?
- 14 Is there a modeling factor that is a critical
- 15 constraint for the impact analysis that is not
- 16 reflected in 1143 as an operational criteria?
- 17 WITNESS PARKER: I would say there is no
- 18 single or even small group of modeling criteria that
- 19 drove the result of the difference between the proposed
- 20 action and the No Action Alternative. One of the
- 21 points that I tried to make in my rebuttal analysis is
- 22 that the proposed action is depicted by the imposition
- 23 of the North Delta Diversion.
- So we have a diversion. And there are
- 25 operating criteria associated with that diversion. All

- 1 of the other modeling criteria, some of which is
- 2 operational, some of which is -- they're modeling
- 3 devices. And I can rattle off balancing rules,
- 4 allocation, San Luis curve, the export estimate curve,
- 5 all these things that people talked about; that set of
- 6 modeling, of modeling devices, did not change between
- 7 No Action and the proposed action.
- 8 Rule curve did change. But that, in and of
- 9 itself, did not drive the answers that we have taken
- 10 from this study.
- 11 CO-HEARING OFFICER DODUC: And you are sure
- 12 that the things that did not change -- the modeling
- 13 assumptions that did not change between the No Action
- 14 and the proposed project are appropriately constant,
- 15 meaning the things that you are changing as a result of
- 16 the WaterFix would not affect those assumptions that
- 17 you insist are constant?
- 18 WITNESS PARKER: I do agree with that. I
- 19 believe that the modeling that was done for this
- 20 project was appropriate. Both the No Action and the
- 21 proposed action, as we have tried to describe in this
- 22 proceeding, reflect an operational philosophy of the
- 23 CVP, speaking for Reclamation, that we feel is
- 24 consistent with current operations.
- 25 The modeling criteria in both the No Action

- 1 and the proposed action are consistent with that
- 2 operating philosophy.
- 3 CO-HEARING OFFICER DODUC: Any other
- 4 questions?
- 5 WITNESS CHILMAKURI: Just one thing to add.
- 6 And I totally agree with Ms. Parker. And just to say
- 7 that it's not changing between No Action and WaterFix.
- 8 In our modeling, we have the same level of assumptions
- 9 between No Action and WaterFix scenarios.
- 10 CO-HEARING OFFICER DODUC: All right. Thank
- 11 you. Thank you for your patience with us. Thank you
- 12 for the extra work that you have put into 1143.
- 13 As Chair Marcus says, these are things that
- 14 are well familiar to you but very complicated to the
- 15 rest of us. So it should come as no surprise that we
- 16 have a lot of confusion, and therefore, we're always
- 17 seeking additional explanation and clarity. So thank
- 18 you.
- 19 All right. With that, we will ask,
- 20 Mr. Mizell, for you to bring up your third panel. And
- 21 we will do direct presentation for about an hour, you
- 22 said. That means we will take our lunch break at noon.
- 23 (Pause in proceedings)
- 24 CO-HEARING OFFICER DODUC: All right.
- 25 Mr. Keeling.

- 1 MR. KEELING: Thank you. Tom Keeling, San
- 2 Joaquin County. With, respect to process in this
- 3 proceeding, I wanted to give you a heads up that we
- 4 want to make a motion to strike -- "we," Ms. Meserve
- 5 and I, will be moving to strike the testimony of two of
- 6 the witnesses on this panel.
- 7 CO-HEARING OFFICER DODUC: Please do.
- 8 MR. KEELING: We understand that you wanted us
- 9 to make such a motion before they testify but before
- 10 they introduce evidence. So I'm asking you what you
- 11 would prefer we do.
- 12 CO-HEARING OFFICER DODUC: Do it now, please.
- 13 MR. KEELING: I'm going to make the motion to
- 14 strike the testimony of Dr. Hanson. Ms. Meserve will
- 15 be making the motion to strike the testimony of
- 16 Dr. Hutton.
- Dr. Hanson's written testimony, which is
- 18 DWR-1223, purports to rebut opinions and statements
- 19 within the protestants' testimony, of course; it's
- 20 rebuttal; they're supposed to.
- 21 However, when we turn to the cited portions of
- 22 protestants' testimony that we are told are being
- 23 rebutted, the opinions and statements supposedly being
- 24 rebutted are not there. This is not rebuttal
- 25 testimony.

1 The witness first attributes to the other side

- 2 a statement or position they never made and then offers
- 3 testimony to rebut the statement or position that was
- 4 never made -- the typical, classic straw dog exercise.
- 5 On Pages 2 and 3 of DWR-1223 -- and if it
- 6 would assist, perhaps Mr. Long could put that up.
- 7 CO-HEARING OFFICER DODUC: Please do.
- 8 MR. KEELING: On Pages 2 through 3, you will
- 9 find in the list of protestants' testimony Dr. Hanson's
- 10 opinion or intent -- is intended, it says, "rebuts."
- 11 You'll see it starting at around Line 23. Actually, up
- 12 at Line 18 and then continuing with the rest of the
- 13 page and then again on the top of Page 3 down to
- 14 Line 13 of Page 3.
- 15 And then on Page 3 he identifies his rebuttal
- 16 opinions that he's about to give. And you can see that
- 17 they take two forms, first, those five bullet points
- 18 called "Summary of Testimony," continues on up the --
- 19 yes.
- 20 And then up at the top, going back up to the
- 21 top, Mr. Long.
- It says, "Also I am responding to several
- 23 parties whose experts suggested that the Board's 2010
- 24 flow criteria report and the Board's Phase 2 technical
- 25 basis report should be adopted -- accepted without

- 1 modification." So those are the opinions that he's
- 2 going to give.
- 3 And then in his conclusion, on Page 27, he
- 4 repeats, I think, verbatim the bullet point opinions
- 5 that he says on Page 3 he's going to give.
- 6 It's classic. You tell the audience what
- 7 you're going to say, and then you say it, and then you
- 8 tell them what you just said. So it follows that form.
- 9 Let's take a look at what I'm talking about
- 10 here. Let's go back to Pages 2 and 3.
- 11 In fact, Page 3, Line 25 and following, the
- 12 witness states in his -- states his opinion that,
- 13 quote, "Multiple authors have concluded that flow alone
- 14 cannot be used to restore the Delta." Then he states
- 15 that the Delta -- this point, he continues, "The Delta,
- 16 as it existed before large-scale alteration by humans,
- 17 cannot be recreated."
- And he adds at the end of the bullet point,
- 19 paragraph, "Buchannan, et al., also concluded that
- 20 increased flow alone will not be sufficient to resolve
- 21 the low salmonid survival in the Delta."
- 22 But none of the protestants' testimony cited
- 23 on Pages 2 and 3, Mr. Hanson's testimony, states that
- 24 flow alone can be used to restore the Delta or that
- 25 flow alone will be sufficient to resolve the low

- 1 salmonid survival in the Delta. And none of that
- 2 testimony, none of that testimony states that the Delta
- 3 as it existed before large-scale alteration by humans
- 4 can be recreated.
- 5 CO-HEARING OFFICER DODUC: Hold on. I know
- 6 you're on a roll, but I'm going to stop you so that I
- 7 can better understand this.
- 8 My understanding of this bullet that you just
- 9 focused on starting on Line 25 is that it is actually
- 10 his rebuttal testimony; it's not the testimony to which
- 11 he is rebutting.
- MR. KEELING: I understand that, too. But
- 13 what does this respond to if that's his rebuttal
- 14 testimony? Nobody stated those opinions that he's
- 15 rebutting.
- 16 CO-HEARING OFFICER DODUC: So let's backtrack
- 17 because I think you're moving ahead here. Are you
- 18 alleging that -- on pages -- at the bottom of Page 2
- 19 and beginning of Page 3, that, where there is citation
- 20 of testimony to which Dr. Hanson is rebutting, that
- 21 that -- those citations are incorrect, that he's
- 22 somehow misinterpreted the rebuttal -- the testimony to
- 23 which he is rebutting?
- MR. KEELING: I don't think he's
- 25 misinterpreted anything. They're not there. The

- 1 statements that he is rebutting do not exist there or
- 2 anywhere else. Can you imagine any -- you sat through
- 3 this for two years. Have you ever heard any witness
- 4 say in writing or orally that flow alone is sufficient?
- 5 And I was curious, so I went back and read
- 6 every word of the testimony he cites. It's not there.
- 7 Have you ever heard a witness in this proceeding say,
- 8 "We think the Delta could be recreated the way it was
- 9 before" --
- 10 CO-HEARING OFFICER DODUC: Hold on. Hold on,
- 11 Mr. Keeling.
- MR. KEELING: It's not there.
- 13 CO-HEARING OFFICER DODUC: Let's look at
- 14 Page 3, beginning of Page 3 where he says that he's
- 15 responding to parties that suggest the flow criteria
- 16 report and the Phase 2 technical report should be
- 17 accepted without modification.
- Do you disagree that there are experts who
- 19 testified in this proceeding who've made that
- 20 suggestion regarding the flow criteria report and
- 21 technical basis report?
- MR. KEELING: Absolutely I disagree. I've
- 23 searched every word. There is not a single sentence or
- 24 statement in any of this.
- 25 Let's go through -- if you want to go through

- 1 each one of these, we can do this. Let's go through --
- 2 for example, he cites CSPA-202, which CSPA-202 Errata
- 3 is Mr. Shutes' testimony. All right? He cites Pages 7
- 4 through 11.
- 5 When you go to CSPA-202 Errata, we find
- 6 Mr. Shutes opining that, because the services, the
- 7 federal services, are not at this hearing, it becomes
- 8 essential to review what CDFW, USFWS, and NMFS have
- 9 already said and that their analysis in the 2010
- 10 informational Delta flow criteria proceeding is of
- 11 particular importance. That's what he says. And then
- 12 he goes on to summarize a few of the services'
- 13 discussions. Nothing about accepting wholesale or
- 14 whole-hog the 2001 report.
- 15 He goes on to Page 9, where he continues his
- 16 summary of some of the services' comments and analyses,
- 17 never opining that the whole- -- wholesale adoption
- 18 without modification of the report.
- 19 It goes on on Pages 10 and 11 with the same,
- 20 continue -- just summarizing the -- and 10, 11, and 12,
- 21 summarizing these analyses.
- 22 CO-HEARING OFFICER DODUC: So, Mr. Keeling,
- 23 your assertion is that Dr. Hanson either misunderstood
- 24 or misrepresented the testimony of your and other
- 25 protestants' witnesses to which he then rebuts?

- 1 MR. KEELING. Yes. Whether he misinterpreted
- 2 or anything else doesn't matter. The question that the
- 3 Hearing Officers have addressed when this came up in
- 4 prior rebuttal was does the rebuttal testimony actually
- 5 rebut the testimony it's supposed to be rebutting.
- 6 Now, I can walk us through, for example, he --
- 7 CO-HEARING OFFICER DODUC: Hold on. I'm not
- 8 asking you to walk us through every one of them. I'm
- 9 just trying to understand the crux of your motion.
- 10 MR. KEELING: All right. On top of that --
- 11 CO-HEARING OFFICER DODUC: Okay?
- 12 MR. KEELING: -- based on prior rulings from
- 13 the Hearing Officers on rebuttal being stricken as not
- 14 proper rebuttal, the Hearing Officers have demanded
- 15 more than an attenuated amorphous or purely subjective
- 16 interpretation. You know, it's one thing for witnesses
- 17 to say, "Well, in my view, so-and-so's testimony sort
- 18 of suggested that," so then --
- 19 CO-HEARING OFFICER DODUC: I understand our
- 20 ruling, Mr. Keeling.
- 21 MR. KEELING: All right. Now I'm making an
- 22 offer of proof. I'm going to walk here right now
- 23 through every single piece of testimony cited. But
- 24 I -- if you don't want me to do that, I won't.
- We can do -- what I would also offer, if you

- 1 prefer, to do voir dire of the witness on this. So
- 2 that is my -- the basis of my motion to strike.
- 3 We can go down some of these other bullet
- 4 points, but it's the same. And I believe Ms. Meserve
- 5 is making a motion with respect to Dr. Hutton.
- 6 CO-HEARING OFFICER DODUC: All right. Let's
- 7 hear from Ms. Meserve, and then I'll ask Mr. Mizell or
- 8 Mr. Berliner to respond.
- 9 MS. MESERVE: Good morning. Yes, there's --
- 10 many of the same citations are used as a basis for
- 11 Dr. Hutton's testimony as well that are in the Hanson
- 12 testimony. But --
- 13 CO-HEARING OFFICER DODUC: That would be 1224?
- MS. MESERVE: Yes. Which -- so, similar to
- 15 the Hanson testimony, citations are provided to which
- 16 rebuttal is supposedly being provided, but when one
- 17 looks for the statements in the cited testimony, those
- 18 statements aren't there.
- 19 And so my understanding is that the -- from
- 20 our February 21st, 2017 ruling, that the rebuttal
- 21 evidence should be responsive to evidence presented in
- 22 connection with the case in chief. And it appears that
- 23 both the Hutton and the Hanson papers appear to be
- 24 material that the petitioners would like to have the
- 25 hearing consider but aren't specifically tied to pieces

- 1 of testimony.
- 2 And so the focus of the Hutton piece is
- 3 apparently that he believes that the diversion of
- 4 freshwater and the alteration of natural flow patterns
- 5 in recent years and decades -- that's what he's
- 6 addressing and does a very long paper about, but none
- 7 of the rebuttal -- sorry, the case in chief testimony
- 8 he cites is making the assertion he's apparently
- 9 rebutting.
- 10 So, you know, again, we could kind of go
- 11 through the details, but it's a lot of the same cites.
- 12 And it's kind of disturbing because, you know, some of
- 13 the citations provided in both Hanson and Hutton are,
- 14 for instance, a transcript where the flow report is
- 15 mentioned; there's no assertion made whatsoever.
- 16 Like for both the cross-examination of
- 17 Dr. Rosenfeld and Mr. Baxter that are mentioned in both
- 18 of these witnesses' testimony, there's mentions of a
- 19 flow report, not a whole -- there's no urging of a
- 20 wholesale adoption of a flow report.
- 21 So it appears that both of these testimonies
- 22 are improper rebuttal. And there's insufficient
- 23 information in the testimony itself, with respect to
- 24 Hutton, to show that the materials, which go some 38
- 25 pages long, are responding to -- to testimony in the

- 1 case in chief. So that's the basis.
- 2 CO-HEARING OFFICER DODUC: And Ms. Meserve and
- 3 Mr. Keeling, does -- is that also -- the incorrect
- 4 citation that you speak of, does that apply to both the
- 5 references to transcripts as well as references to
- 6 exhibits?
- 7 MS. MESERVE: Yes. I was focusing on --
- 8 there's some citations on Page 2, Line 17 through 24 in
- 9 Hutton that are the same list of citations that's
- 10 provided in Hanson.
- 11 And so Mr. Keeling and I have looked at those
- 12 citations, and we don't find that they make the
- 13 statements that either witness is rebutting.
- 14 CO-HEARING OFFICER DODUC: All right. Anyone
- 15 else want to speak up in support of the motion before I
- 16 hear petitioners?
- 17 MR. JACKSON: Yes. On behalf of CSPA, since
- 18 we've been mentioned regularly in there, I would object
- 19 to the introduction of any evidence from either person.
- 20 It's -- we have been very -- the Board has
- 21 been -- the Hearing Officers have been very consistent
- 22 throughout this hearing of limiting opportunity to go
- 23 beyond the scope of the case in chief testimony that
- 24 they are rebutting. In this particular circumstance,
- 25 there are all -- all number of newer, sometimes,

- 1 documents that are being admitted as exhibits to
- 2 support testimony in rebuttal of statements that were
- 3 not made.
- 4 So it would seem to me that what's really
- 5 happening is we are now seeing a second case in chief.
- 6 CO-HEARING OFFICER DODUC: Ms. Des Jardins.
- 7 MS. DES JARDINS: I wanted to join in the
- 8 motion to strike by County of San Joaquin and
- 9 Mr. Keeling and Ms. Meserve for Local Agencies of the
- 10 North Delta.
- 11 And specifically, I wanted to note that the
- 12 Board has already ruled that the entire 2010 Delta flow
- 13 criteria report is not a subject for rebuttal. It has
- 14 to be tied -- rebuttal in the San Joaquin Tributaries
- 15 Authority, striking a large part of their case because
- 16 there wasn't very specific testimony that it was tied
- 17 to.
- 18 I also wanted to add I do have a motion to
- 19 strike portions of Acuna's testimony, Exhibit DWR-1214,
- 20 because on Page 2, at 24 to 25, it's the exact same
- 21 language, "I am also responding to several parties
- 22 whose experts suggested that the SWRCB's 2010 Flow
- 23 Criteria Report and Phase 2 Technical Basis Report,"
- 24 and citing the exact same citations.
- 25 And, again, this is vastly expanding the scope

- 1 of rebuttal. It cites a large number of documents and
- 2 studies that are not cited by any of the experts. It
- 3 would require a significant expansion -- it would
- 4 require significant time to consider all this evidence
- 5 that should have been presented in the Protestants --
- 6 in DWR's case in chief.
- 7 The Hearing Officers have limited
- 8 cross-examination -- for example, on the Vernalis
- 9 standards, it's not an example -- it's not to open up
- 10 questions, any cross on Vernalis. It has to be very
- 11 specific; it has to be tied to something they say; it
- 12 has to be tied to the specific study that they cite.
- 13 And that standard needs to be applied also to this
- 14 rebuttal by DWR.
- 15 CO-HEARING OFFICER DODUC: So I got lost on
- 16 that long statement. Are you making a new motion to
- 17 strike something?
- 18 MS. DES JARDINS: Yes. It's for Acuna Exhibit
- 19 DWR-1214. And I do have --
- 20 CO-HEARING OFFICER DODUC: I'm sorry. Hold
- 21 on. Are you moving to strike the entirety of
- 22 Dr. Acuna's testimony?
- 23 MS. DES JARDINS: No. There are specific
- 24 sections which I could bring up and explain. But it
- 25 is -- there are -- are, for example, Opinion 1.

1 CO-HEARING OFFICER DODUC: What is the basis

- 2 for that motion?
- 3 MS. DES JARDINS: First -- first, that he says
- 4 he's responding to several parties whose experts
- 5 suggested that the 2010 flow criteria report and the
- 6 Phase 2 technical basis report, there's the same
- 7 citation as in Hanson.
- 8 CO-HEARING OFFICER DODUC: So are you not --
- 9 it's not that it's the same citation. Are you
- 10 asserting that Dr. Acuna's testimony is also
- 11 inappropriate because it is not responsive to
- 12 case-in-chief testimony that is referenced?
- 13 MS. DES JARDINS: There are specific sections.
- 14 Example 1, statement says, "Many studies
- 15 demonstrate current status of Delta smelt is the result
- of multiple factors." There's no reference --
- 17 CO-HEARING OFFICER DODUC: The fact that --
- MS. DES JARDINS: -- to any testimony by
- 19 any -- any testimony that it's rebutting. It's --
- 20 rebuttal is not an opportunity to --
- 21 CO-HEARING OFFICER DODUC: I understand what
- 22 rebuttal is and isn't. So I will note that you have
- 23 now made a motion to strike Dr. Acuna's testimony from,
- 24 what I understand, based on the same grounds that
- 25 Ms. Meserve and Mr. Keeling made for Dr. Hanson's and

- 1 Dr. Hutton's testimony in that you believe Dr. Acuna's
- 2 rebuttal testimony incorrectly cites case-in-chief
- 3 testimony to which he is rebutting.
- 4 MS. DES JARDINS: And there's also some that's
- 5 very vague. It would be specifically Opinion 1 at 321
- 6 to 412.
- 7 CO-HEARING OFFICER DODUC: We're not arguing
- 8 his opinion.
- 9 MS. DES JARDINS: Okay. So -- so there's
- 10 specific sections -- 321 to 412, 413 to 425,
- 11 CO-HEARING OFFICER DODUC: What about them?
- MS. DES JARDINS: Those are the the sections
- 13 that I'm moving to strike.
- 14 CO-HEARING OFFICER DODUC: Okay.
- 15 MS. DES JARDINS: 5, 9 -- 5 at 9 to 5 at 25.
- 16 Again, these are all because they're not not linked
- in -- they're not clearly linked in witnesses'
- 18 testimony.
- 19 CO-HEARING OFFICER DODUC: Okay.
- 20 ATTY AT PODIUM: 9 at 11 to 9 at 21, and 10 at
- 21 4 to 10 at 7, and 10 at 11 to 10 at 9 and 12 at 5 to 6.
- 22 And all because they're not linked to any witness --
- 23 there's no clear link to any witness's testimony, and
- 24 there's no indication that they're within the scope of
- 25 rebuttal to specific testimony.

- 1 CO-HEARING OFFICER DODUC: Mr. Herrick.
- 2 MR. HERRICK: Thank you, John Herrick for
- 3 South Delta parties.
- 4 I'd like to join in Mr. Keeling and
- 5 Ms. Meserve's motion to the degree that she's objecting
- 6 to Dr. Hutton's testimony relating to the flow report
- 7 and Phase 2 technical basis report.
- 8 I would just add -- everything's been said. I
- 9 think that the San Joaquin Tributaries Association were
- 10 admonished to not try to go over the specifics for
- 11 verif -- the veracity of the report because it should
- 12 have been in their case in chief.
- 13 In this instance, we believe that Mr. Hutton's
- 14 testimony is rebutting nothing because nobody we want
- 15 into the 2010 flow report or whether it was good or
- 16 bad. The basis for it was mentioned a number of times.
- 17 And the result of the rulings and this
- 18 approach, so to speak, is that only the petitioners
- 19 will then be able to question the veracity of the
- 20 report unless we have some sort of surrebuttal because
- 21 nobody's able to rebut his testimony.
- 22 And I don't think -- it doesn't play out
- 23 correctly in that it's -- it's rebutting something that
- 24 wasn't asserted. So anyway, thank you. Sorry I talked
- 25 so long.

- 1 CO-HEARING OFFICER DODUC: Thank you,
- 2 Ms. Herrick.
- 3 Mr. Berliner, Mr. Mizell?
- 4 MR. MIZELL: I believe that the witnesses have
- 5 provided copious citations in the multiple testimonies
- 6 that were just discussed. It's -- without going into
- 7 specifics because there was quite a lengthy list of
- 8 them, and I would have to review the transcript to get
- 9 precision in that.
- 10 But generally speaking, it strikes me that, if
- 11 three experts read the transcripts and the testimony of
- 12 other parties and come to similar conclusion about what
- 13 is being asserted, that that gives a certain weight to
- 14 that reading of the testimony.
- 15 It was expressed at some length in Part 2 case
- in chief with regard to NRDC's witnesses. And I
- 17 believe you had to put up with an extensive line of
- 18 objections from the Department with regard to NRDC's
- 19 testimony over existing conditions that these witnesses
- 20 are now responding to.
- 21 I believe that, by allowing NRDC's
- 22 case-in-chief testimony, it has provided the basis for
- 23 all of these witness's rebuttals.
- 24 CO-HEARING OFFICER DODUC: I'm sorry. Help me
- 25 understand. How did the discussion on existing

- 1 conditions lead to the testimony in question if that
- 2 testimony is not in response to direct testimony in
- 3 case in chief?
- 4 MR. MIZELL: Yes, I'm sorry if I confused the
- 5 matter.
- 6 CO-HEARING OFFICER DODUC: Yes, you did.
- 7 MR. MIZELL: It is in direct response to
- 8 case-in-chief testimony so far as I'm aware.
- 9 CO-HEARING OFFICER DODUC: Okay.
- 10 MR. MIZELL: I'm indicating that the citations
- 11 go to a number of different parties including NRDC.
- 12 And I'm using that as an example in my response here.
- 13 Generally speaking, NRDC's case in chief went to
- 14 exploring the existing conditions and the reasonable
- 15 protection of those existing conditions.
- 16 The 2010 flow criteria report was cited by
- 17 NRDC's witnesses as an example. And whether or not the
- 18 2010 flow criteria report represents reasonable
- 19 protection is, generally speaking, what these witnesses
- 20 are here to discuss. So it would be indirect response
- 21 to another party's case in chief and appropriate
- 22 rebuttal.
- 23 However, I recognize there are a number of
- 24 specific citations that have been provided. I think we
- 25 would need time to see those specific citations and

- 1 consider a response to each of them.
- 2 CO-HEARING OFFICER DODUC: Anything else
- 3 before I turn to Ms. Morris?
- 4 MR. MIZELL: If we were to try and respond, I
- 5 believe that we would need more information from
- 6 Ms. Meserve. So if the objecting parties could list
- 7 the challenged provisions of the -- the challenged
- 8 portions of the testimonies in writing, then we would
- 9 be able to address them specifically.
- 10 CO-HEARING OFFICER DODUC: Ms. Morris?
- 11 MS. MORRIS: Thank you. I would join in the
- 12 objection and specifically, not only through direct
- 13 testimony and the citations there, the 2010 flow
- 14 criteria report was brought up. And there's extensive
- 15 discussion of the Hearing Officer with the CSPA about
- 16 how it will and it is going to be considered and how
- 17 important it is.
- 18 And in response to that, on -- and on top of
- 19 the existing exhibits -- and I disagree with
- 20 Mr. Mizell. I don't think this requires documentation
- 21 because, if we just go to PCFFA-145, which is -- it's
- 22 cited in all of these testimonies. It is a 55-page
- 23 report that was submitted as direct evidence by PCFFA
- 24 regarding -- and this is the title of it, "Sacramento
- 25 and San Joaquin Flows, Flood Plains, Other Stressors in

- 1 Adaptive Management."
- 2 And if you go to first page of that, it talks
- 3 about inflows and the strong influence on the quality
- 4 of water, productivity of the Delta ecosystem,
- 5 abundance, growth, and survival of many Delta species.
- 6 And all of this evidence that has been presented by the
- 7 three witnesses that there are objections to respond to
- 8 that.
- 9 So this report alone opens up the door to all
- 10 of this rebuttal testimony, in my opinion.
- 11 CO-HEARING OFFICER DODUC: All right.
- 12 Mr. Bezerra.
- 13 MR. BEZERRA: Yes, thank you. Surprisingly
- 14 enough, I'd like to support the Department's position
- 15 on this. I think this is a pretty simple matter. In
- 16 NRDC --
- 17 CO-HEARING OFFICER DODUC: Actually, I'm not
- 18 surprised at all.
- MR. BEZERRA: Okay. Well, so much for that.
- 20 NRDC's -- in NRDC-58 Errata, Dr. Rosenfeld
- 21 proposed a number of terms and conditions, including on
- 22 Page 42, proposed Term and Condition 2A is about
- 23 maintaining December-through-Jan- -- June unimpaired
- 24 flows. These witnesses are clearly attempting to
- 25 demonstrate that that will not be an effective term and

- 1 condition.
- 2 In addition, in CSPA-202, Mr. Shutes cited not
- 3 only the -- this Board's 2010 Delta flow criteria
- 4 report but a whole laundry list of materials, including
- 5 CDFW's 2010 flows informational document that I believe
- 6 also deals with unimpaired flows.
- 7 Again, these witnesses are responding to those
- 8 items. So I think it's pretty clearly within the scope
- 9 of rebuttal.
- 10 CO-HEARING OFFICE DODUC: Final word,
- 11 Mr. Keeling, since you started all this? Or would you
- 12 like Mr. Jackson to have his say first and then you may
- 13 have the final words?
- MR. KEELING: Why don't you take it.
- 15 MR. JACKSON: The 2010 flow hearing document
- 16 is in the record. As I understand it, it was a
- 17 document produced by the Board. We assumed that --
- 18 that it was a document that, after the conversation
- 19 between the Chair and Mr. Jennings, that was
- 20 appropriate for case in chiefs.
- 21 We did not mention the document as the reason
- 22 for you making a determination. The -- as I understand
- 23 these particular documents that have been put out here,
- 24 they're new. The arguments are new. The attack on the
- 25 2010 document is new. And we would have, the way this

- 1 lines up, a -- we would need a long time for
- 2 surrebuttal.
- 3 So what I'm asking for is that it be stricken
- 4 because it was appropriate in their case in chief.
- 5 They knew about the 2010 document; they knew about the
- 6 other work that the Board had done; and they chose not
- 7 to put it into their direct testimony.
- 8 To bring it up now with a procedural advantage
- 9 is going to consume an awful lot of time as we begin to
- 10 rebut the rebuttal. We've had no opportunity to do
- 11 that under this procedural gotcha game.
- 12 CO-HEARING OFFICER DODUC: Mr. Keeling.
- 13 MR. KEELING. Thank you. I think Ms. Morris's
- 14 citation of one of the alleged sources that the witness
- 15 Hanson and I think Hutton are rebutting, PCFFA-145,
- 16 Ms. Morris cited. I'm sure she meant to say it, but
- 17 perhaps she neglected to say that that isn't new
- 18 testimony. That is a February 16, 2010 testimony of
- 19 John Cain, Dr. Opperman, and Dr. Tompkins submitted in
- 20 the 2010 Delta flow criteria proceeding before this
- 21 Board.
- 22 So to use a few citations, well, somebody
- 23 referred to the 2010 report as a platform for a full
- 24 set of dozens of pages in these two testimonies
- 25 basically attacking the 2010 flow report runs afoul of

- 1 the precedent that you have set with respect to the
- 2 scope of rebuttal.
- 3 And on that point, Mr. Mizell pointed out that
- 4 there were -- his words not mine, copious citations,
- 5 end of quote, provided by the witnesses. Absolutely.
- 6 And that's why I offered to take the Hearing Officers
- 7 through each and every one to show that the opinions
- 8 stated by Dr. Hanson, in my case, are not in there.
- 9 Mr. Mizell went on to say that the witnesses'
- 10 interpretation of the testimony -- and he says for the
- 11 three of them, it couldn't be wrong with three experts,
- 12 after all. The witnesses' interpretation of the
- 13 testimony that they are rebutting should be the
- 14 governing factor in this determination.
- 15 The answer is no. The Hearing Officers have
- 16 made it very clear in the past in ruling on the scope
- of rebuttal that that's not the case, that it's more
- 18 objective standard and not a subjective standard.
- 19 And with that I'll subside.
- 20 CO-HEARING OFFICER DODUC: All right. Enough,
- 21 everybody. Thank you for your contribution.
- 22 Here's what I would like to do. Mr. Mizell, I
- 23 agree that we do need time and more specificity to
- 24 respond to these motions.
- Ms. Meserve, Mr. Keeling, Ms. Des Jardins, you

- 1 may have until 5:00 p.m. tomorrow to file in writing
- 2 your written motions to strike. Mr. Mizell, Berliner,
- 3 you and anyone else, Mr. Bezerra, wishing to respond to
- 4 those motions may have until 5:00 p.m. Friday to do so.
- 5 In the meantime, we will proceed with this
- 6 panel, with the exception of Dr. Hanson, Dr. Hutton,
- 7 and Dr. Acuna.
- 8 MR. MIZELL: So if I understand, we will not
- 9 be presenting the oral summary of those three witnesses
- 10 for the time being?
- 11 CO-HEARING OFFICER DODUC: For the time being.
- 12 If necessary, if we wrap up with the remainder of the
- 13 panel, we will just have to find another time, should
- 14 it be the Board's decision, to bring back these
- 15 witnesses out of order.
- 16 But I would like to proceed with the rest of
- 17 your panel today.
- MR. MIZELL: Okay. Very well. Should we
- 19 swear all of them in, then, now pending the ruling?
- 20 CO-HEARING OFFICER DODUC: That can wait. I
- 21 don't want anyone to make any misinterpretation should
- 22 we swear them in now.
- MR. MIZELL: So we can then dismiss?
- 24 CO-HEARING OFFICER DODUC: We can.
- Thank you, Dr. Hanson, Dr. Hutton, and

- 1 Dr. Acuna.
- With that change, Mr. Mizell, how much time do
- 3 you need for direct of the remaining witnesses? If
- 4 it's more than 20 minutes, then I suggest we break and
- 5 resume after our lunch break.
- 6 MR. MIZELL: I have one witness for 20 minutes
- 7 and one witness for 5 minutes.
- 8 CO-HEARING OFFICER DODUC: And that's would
- 9 that be okay if we go for 25 minutes?
- 10 THE REPORTER: Yes.
- 11 CO-HEARING OFFICER DODUC: Okay.
- 12 I'm checking with the most important person
- 13 here, and that is the court reporter. In that case,
- 14 then, does any need to take the oath?
- MR. MIZELL: Both Dr. Grimaldo and --
- 16 CO-HEARING OFFICER DODUC: Okay. Please stand
- 17 and raise your right hand.
- 18 (Witnesses sworn)
- DR. LENNY GRIMALDO, DR. CHRIS EARLE,
- and MR. MICHAEL BRADBURY,
- 21 called as Part 2 Rebuttal Panel 3
- 22 witnesses for the petitioners, having
- 23 been duly sworn, were examined and
- 24 testified as hereinafter set forth:
- 25 MR. MIZELL: Thank you. Just going back to

- 1 the witness structure, Dr. Phillis provided supporting
- 2 testimony to one of the witnesses who's been dismissed,
- 3 I assume that he can also step away until it is
- 4 determined --
- 5 CO-HEARING OFFICER DODUC: Yes. Thank you,
- 6 Dr. Phillis.
- 7 MR. MIZELL: Thank you very much. With the
- 8 remaining witnesses, I'll simply go through our first
- 9 introductory questions, and I'll turn it over to
- 10 Dr. Earle.
- 11 DIRECT EXAMINATION BY MR. MIZELL
- 12 MR. MIZELL: Dr. Earle, is DWR-1003 a true and
- 13 correct copy of your statement of qualifications?
- 14 WITNESS EARLE: Yes, it is.
- MR. MIZELL: And is DWR-1219 a true and
- 16 correct copy of your testimony for rebuttal?
- 17 WITNESS EARLE: Yes, it is.
- 18 MR. MIZELL: Mr. Bradbury, is DWR-1201 a true
- 19 and correct copy of your statement of qualifications?
- 20 WITNESS BRADBURY: Yes, it is.
- 21 MR. MIZELL: And is DWR-1215 a true and
- 22 correct copy of your testimony for Part 2 Rebuttal?
- 23 WITNESS BRADBURY: Yes, it is.
- 24 MR. MIZELL: Dr. Grimaldo, is DWR-1207 a true
- 25 and correct copy of your statement of qualifications?

- 1 WITNESS GRIMALDO: Yes, it is.
- 2 MR. MIZELL: And is DWR-1222 a true and
- 3 correct copy of your Part 2 Rebuttal testimony?
- 4 WITNESS GRIMALDO: Yes, it is.
- 5 MR. MIZELL: Thank you.
- 6 And with that, we'll turn to Dr. Earle, who
- 7 has about 20 minutes. And after that, he will be
- 8 followed by Dr. Grimaldo with about five minutes
- 9 WITNESS EARLE: Thank you, and good morning.
- 10 I am just going to briefly summarize my
- 11 rebuttal testimony. You may recall that when last I
- 12 appeared in these chambers in March of this year, I
- 13 delivered a series of opinions, cumulatively indicating
- 14 the opinion that I believe that the California WaterFix
- would be reasonably protective of wildlife species
- 16 found in the Delta.
- 17 My rebuttal testimony addresses the
- 18 allegations of a variety of protestants that it would
- 19 not be with regard to particular species of concern to
- 20 them. And so my rebuttal testimony presents evidence
- 21 and affirms that, in fact, I have the opinion that the
- 22 WaterFix would be reasonably protective of the black
- 23 rail, the white-tailed kite, the greater Sandhill
- 24 crane, the lesser Sandhill crane, Swainson's hawk, and
- 25 the giant garter snake, along with all the other

- 1 wildlife species.
- 2 And there's also an opinion that I express
- 3 here indicating that the activities associated with
- 4 wildlife movement across the landscape would not be
- 5 unduly prevented or interfered with by the California
- 6 WaterFix.
- 7 And, finally, I would like to state that the
- 8 administrative Draft Supplemental EIS does not contain
- 9 any information that would tend to change that opinion,
- 10 that, in fact, it generally indicates project revisions
- 11 that are favorable for terrestrial wildlife found in
- 12 the Delta.
- 13 And with that, I'm ready to answer questions
- 14 on my testimony. Thank you.
- MR. MIZELL: Apparently it will be much
- 16 shorter than 25 minutes.
- 17 CO-HEARING OFFICER DODUC: Always keep the
- 18 attorney on his toes. Good job, Dr. Earle.
- 19 WITNESS GRIMALDO: Shall I go? I'm feeling
- 20 really lonely now.
- 21 My name is Lenny Grimaldo. I'm currently
- 22 employed as a senior fisheries scientist with ICF.
- 23 I've been employed there for the past 4.5 years.
- 24 Prior to coming to ICF, I worked as a
- 25 fisheries biologist with the Department of Water

- 1 Resources for 15 years and the Bureau of Reclamation
- 2 for 5 years. My full CV is attached as DWR
- 3 Exhibit-1207.
- 4 There are three corrections that I'd like to
- 5 update the Board on my testimony. The first two are
- 6 relatively minor. On Page 9, Line 23 --
- 7 MR. MIZELL: Dr. Grimaldo, if you could wait
- 8 until it comes up on the screen --
- 9 WITNESS GRIMALDO: Oh, sure.
- 10 MR. MIZELL: -- so the Chair can follow you
- 11 better.
- 12 WITNESS GRIMALDO: That the word or acronym
- 13 "FEIR/S" should read ITP.
- Let me know when you're ready to move on.
- Page 3, Line 9, in front of "Delta," it should
- 16 read "Bay-Delta Estuary."
- 17 And then the last one, Page 3, Lines -- Lines
- 18 25 through 26, that sentence got really jumbled and
- 19 mangled in editing. I would like to read the sentence
- 20 as it should be correctly stated:
- 21 "Flow provides a mechanism for increased
- 22 regional abundance of starry flounder into the
- 23 San Francisco Estuary as a function of two-layer
- 24 gravitational circulation, but it is unknown if flow
- 25 affects overall coastal abundance."

- 1 CO-HEARING OFFICER DODUC: Repeat, please.
- 2 WITNESS GRIMALDO: "Flow provides a mechanism
- 3 for increased regional abundance of starry flounder
- 4 into the San Francisco Estuary as a function of
- 5 two-layer gravitational circulation, but it is unknown
- 6 if flow affects overall coastal abundance."
- 7 CO-HEARING OFFICER DODUC: And that will
- 8 replace that first sentence starting on Line 25 and
- 9 ending on Line 27?
- 10 WITNESS GRIMALDO: Correct. And that same
- 11 line is on Page 13, Lines 9 through 12. It's the same
- 12 sentence in two places.
- 13 CO-HEARING OFFICER DODUC: All right.
- 14 WITNESS GRIMALDO: Okay. If I can continue
- 15 with my testimony.
- 16 Over the past two decades, my research has
- 17 focused on food webs, ecology of tidal marsh
- 18 environments, and ecology of native fishes and longfin
- 19 smelt in the San Francisco Estuary.
- 20 MR. MIZELL: Dr. Grimaldo, if I might, bring
- 21 the pace a little slower for the benefit of the court
- 22 reporter.
- 23 WITNESS GRIMALDO: Okay. I'm here to provide
- 24 testimony on behalf of DWR for the California WaterFix
- 25 permit application to the Board.

In my testimony, I provide updates on the

- 2 state of emerging science for longfin smelt, much of
- 3 which I'm eager to share with the Board today.
- 4 Specifically as discussed in my testimony, I talk about
- 5 how this new research pertains to longfin smelt
- 6 entrainment risk and spring abundance relationships.
- 7 I'm also here to rebut testimony provided
- 8 during the previous hearing and provide my opinion
- 9 about factors that affect longfin smelt in the
- 10 San Francisco Estuary. The specifics of my rebuttal
- 11 opinions are provided in my written testimony,
- 12 DWR-1222.
- 13 As an overview, my opinions are the following.
- 14 Entrainment of longfin smelt at the State
- 15 Water Project and Central Valley Project does not
- 16 represent a significant source of mortality to the
- 17 longfin smelt population. This is especially true
- 18 under the current Fish and Wildlife and NMFS Biological
- 19 Opinions and also during the pre-Biological Opinion
- 20 period.
- 21 Opinion 2. Longfin smelt spawning and rearing
- 22 in San Francisco Bay and Bay Area tributary and marshes
- 23 is one of several key mechanisms that may explain why
- 24 longfin smelt recruitment is higher in years with
- 25 higher spring outflow.

- In my opinion, I recognize that transport
- 2 flows can be one mechanism that explains where and how
- 3 larval longfin smelt get distributed in the estuary but
- 4 do not believe that reduced entrainment from transport
- 5 flows to be a key mechanism underlying the spring-fall
- 6 outflow relationship.
- 7 Finally, in light of new research, much of
- 8 which was overlooked by previous testimony from NRDC,
- 9 it is also my opinion that juvenile longfin smelt have
- 10 low -- little dependence on low salinity habitat.
- 11 My third opinion is the following: Freshwater
- 12 harmful algal blooms do not have a significant effect
- 13 on longfin smelt because longfin smelt do not reside in
- 14 significant abundances when and where freshwater
- 15 harmful algal blooms occur.
- 16 Then finally, starry flounder recruitment into
- 17 the San Francisco Estuary during wetter years is due to
- 18 two-layer gravitational circulation, but in my opinion,
- 19 we do not have data to ascertain how flow affects
- 20 starry flounder abundance overall in the coastal waters
- 21 offshore of San Francisco Bay.
- 22 In my opinion, I agree with interpretations of
- 23 Kimmerer, et al., 2009 that Pacific herring abundance
- 24 indices are not related to flow.
- 25 CO-HEARING OFFICER DODUC: Does that conclude

- 1 your testimony?
- 2 WITNESS GRIMALDO: Concludes, yes.
- 3 CO-HEARING OFFICER DODUC: And you?
- 4 All right. Let me do a couple things. First
- of all, I'd like to get estimates of cross-examination
- 6 of the remaining witnesses. And then, based on that,
- 7 I'd like to discuss the timing for presentation of
- 8 rebuttal by the Sacramento Valley Water Users, which is
- 9 up next, as well as Grassland and maybe even North
- 10 Delta.
- 11 So first of all, time estimates for
- 12 cross-examination?
- MS. NIKKEL: Meredith Nikkel for Groups 7, 8,
- 14 and 9. I have about five or ten minutes.
- MS. DES JARDINS: Deirdre Des Jardins,
- 16 Group 37. I have about an hour and 15 minutes.
- MS. MESERVE: Osha Meserve for Group 47. I
- 18 have about 45 minutes as well. I would note, I have to
- 19 be at a meeting this afternoon, so I might seek to
- 20 adjust the schedule to go earlier or later depending on
- 21 how the cross-exam of this panel goes.
- 22 CO-HEARING OFFICER DODUC: What time do you --
- MS. MESERVE: I have to leave at 2:15.
- 24 CO-HEARING OFFICER DODUC: Okay.
- Mr. Jackson.

- 1 MR. JACKSON: I have about an hour and a half
- 2 for the wildlife folks. And I will be available today
- 3 if you want to move me into somebody else's slot.
- 4 CO-HEARING OFFICER DODUC: All right. If that
- 5 is all, then that is an estimate of, I believe, what,
- 6 one, two, three, almost four hours.
- 7 So Mr. Bezerra, let's plan on having your --
- 8 unless there's redirect on this panel, let's plan on
- 9 having you prepared to present your rebuttal testimony
- 10 tomorrow morning.
- MR. BEZERRA: Will do.
- 12 CO-HEARING OFFICER DODUC: Ms. Morris.
- MS. MORRIS: I had a question about the time
- 14 estimates because now three members of the panel are
- 15 gone. So were those time estimates just for these two
- 16 witnesses and one supporting witness and there's
- 17 additional time -- since they're all one panel?
- 18 CO-HEARING OFFICER DODUC: Yes, yes.
- 19 Mr. Bezerra, before you sit down -- actually,
- 20 you sat down already, but --
- 21 MR. BEZERRA: I need to get my steps today.
- 22 CO-HEARING OFFICER DODUC: Yes, yes. Are you
- 23 estimating 30 minutes or so? How much time do you need
- 24 for presentation?
- MR. BEZERRA: I think that's about right, 30

- 1 minutes for the two witnesses.
- 2 CO-HEARING OFFICER DODUC: And estimated cross
- 3 for the Sacramento Valley Water Users rebuttal?
- 4 MR. MIZELL: I wasn't anticipating being asked
- 5 that question this morning so I will attempt to get you
- 6 an answer this afternoon.
- 7 CO-HEARING OFFICER DODUC: All right. Then
- 8 let me put Grassland on notice as well as North Delta
- 9 Water Agency on notice that they may have to present as
- 10 early as tomorrow.
- 11 MR. BEZERRA: Just in clarification, I suspect
- 12 there may be others in the room who will want to
- 13 cross-examine our panel, given the subject matter. So
- 14 it might be helpful if others had an estimate.
- 15 CO-HEARING OFFICER DODUC: During our lunch
- 16 break, for those who anticipate cross-examination of
- 17 Group 7's rebuttal witnesses, who are Mr. Bourez and
- 18 Dr. -- oh, no -- Dr. Shankar, yes, thank you. Please
- 19 e-mail to the usual e-mail place your requests for
- 20 cross-examination as well as a time estimate. And
- 21 actually, while you're at it, also provide any estimate
- 22 for cross-examination of Grassland and North Delta
- 23 Water Agencies' witnesses.
- MS. NIKKEL: Meredith Nikkel for the North
- 25 Delta parties. Unfortunately, I need to report there

1 was a miscommunication while I was on vacation. So the

- 2 request to switch North Delta was actually a request
- 3 that was intended to be for cross-examination order,
- 4 not for direct testimony order.
- 5 And one of the witnesses, Gary Kienlen, is
- 6 actually not available to testify this week. Given the
- 7 change in the schedule that just occurred, I'm going to
- 8 work my best to find a way to resolve this. But I
- 9 wanted to put the Hearing Team as well as the other
- 10 parties on notice that I'll be working to find a way to
- 11 get North Delta to come in next week. Thank you.
- 12 CO-HEARING OFFICER DODUC: All right.
- 13 All good for now? All right. Let's go ahead
- 14 and take a little bit longer break for lunch, and we
- 15 will return at 1:00 o'clock.
- 16 (Whereupon, the luncheon recess was
- 17 taken at 11:50 a.m.)

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- 1 Tuesday, August 14, 2018 1:00 p.m.
- 2 PROCEEDINGS
- 3 ---000---
- 4 CO-HEARING OFFICER DODUC: All right. It's
- 5 1 o'clock. Welcome back.
- 6 We'll now turn to cross-examination of these
- 7 three witnesses.
- 8 Miss Nikkel, you're up first with 10 minutes,
- 9 and, then, Miss Meserve, we'll get to you. That should
- 10 allow you to finish by 2:15.
- 11 And then we'll get to -- I don't remember the
- 12 order. Does Mr. Jackson's group order come before
- 13 Miss Des Jardins'? I believe so. Yes. Mr. Jackson
- 14 and Miss Des Jardins.
- MR. BERLINER: If I might, I would like to
- 16 request that the Board reconsider the order that was
- 17 discussed this morning moving our witnesses that have
- 18 the alleged testimony that does not comport with the
- 19 rebuttal rules, to allow them, as we have with other
- 20 witnesses where there have been Motions to Strike, to
- 21 allow them to testify. We had -- This week.
- We can bring them back. Two of them are
- 23 local, and Dr. Hanson's in Walnut Creek, so we could
- 24 have them here tomorrow morning.
- We have scheduling problems with witnesses for

1 next week -- starting next week and continuing into the

- 2 week after.
- If we could get them on this week, obviously,
- 4 we understand their testimony's subject to -- to being
- 5 eliminated if the Board should -- should decide in that
- 6 way.
- 7 But we would like to have them go on so that,
- 8 in the event that the Board decides to allow the
- 9 testimony, that testimony can be in the record, and
- 10 they will have undergone cross-examination, and we will
- 11 have solved our scheduling difficulties.
- 12 And, again, it would be consistent with the
- 13 way we've handled other witnesses who are subject to
- 14 Motions to Strike.
- 15 CO-HEARING OFFICER DODUC: And let's make sure
- 16 I understand.
- 17 The witnesses will not be available the next
- 18 two weeks?
- 19 MR. BERLINER: Starting next week and
- 20 continuing, I think, until -- through the 27th --
- 21 CO-HEARING OFFICER DODUC: The 27th.
- MR. BERLINER: -- and they'll be available
- 23 after the 27th.
- 24 CO-HEARING OFFICER DODUC: All right. Thank
- 25 you, Mr. Berliner.

- 1 Miss Meserve, any response to that since you
- 2 are part of the group that made --
- 3 Unless you have something to add.
- 4 MR. O'HANLON: Yes. One point to add.
- 5 This is Dan O'Hanlon on behalf of San Luis and
- 6 Delta-Mendota Water Authority, Westlands Water
- 7 District, Groups 4 and 5.
- 8 I would like to point out that the parties
- 9 that are objecting and that made their Motion to Strike
- 10 orally today, they have had since the Board's order of
- 11 July 27 to have brought a written motion.
- 12 CO-HEARING OFFICER DODUC: Nope.
- MR. O'HANLON: Yes, they could have brought a
- 14 written motion before --
- 15 CO-HEARING OFFICER DODUC: Actually, some of
- 16 the parties have already -- I believe it was
- 17 Westlands -- violated our direction. Our direction was
- 18 to not file -- For what it's worth, our direction was
- 19 to not file any written objections but to make it
- 20 orally at the hearing.
- 21 CO-HEARING OFFICER MARCUS: It's been our
- 22 practice.
- 23 CO-HEARING OFFICER DODUC: It's been our
- 24 practice.
- MR. O'HANLON: Well, I -- There was a response

1 to the motion, which we also responded to -- to the

- 2 Board's order, which we also responded to.
- 3 But it would be helpful, I think, if when
- 4 witnesses are brought, that if there's going to be an
- 5 objection, the parties be given Notice sooner than the
- 6 time that the witnesses are testifying.
- 7 CO-HEARING OFFICER DODUC: Well, that is our
- 8 fault. It was our direction. Miss Meserve and
- 9 Mr. Keeling was complying with our direction, unlike
- 10 another party.
- 11 Miss Meserve.
- 12 MS. MESERVE: The way I understood the
- 13 briefing order that you gave earlier today, is that it
- 14 would avoid a waste of time and resources on
- 15 cross-examining those parties should their testimony or
- 16 portions thereof be stricken. So, in that manner, it
- 17 seems efficient.
- I understand it's led to a cascading effect on
- 19 schedules, so at this point, I don't have a strong
- 20 opinion either way.
- 21 I think, as long as the -- that the merits of
- 22 the motion would not be prejudiced by the presentation
- 23 of the testimony -- I'm not sure that -- and everyone
- 24 who made the motion is not necessarily here.
- 25 But, you know, I could understand. I'm not --

1 I wasn't aware of the scheduling issues that were just

- 2 brought up.
- I think, overall, the way that you ordered it
- 4 to occur would be most efficient, but if there are
- 5 legitimate scheduling issues, that that may be a
- 6 concern that you would want to consider.
- 7 CO-HEARING OFFICER DODUC: Let me ask you
- 8 this, Miss Meserve, speaking only on behalf of the
- 9 parties that you represent, how much would you estimate
- 10 for cross-examination should we -- should we allow for
- 11 those witnesses to return, as Mr. Berliner suggested,
- 12 tomorrow?
- MS. MESERVE: So far, I had focused my
- 14 cross-examination on Dr. Hutton, and I probably had
- 15 about an hour of cross-examination for that witness.
- 16 And Mr. Keeling had focused more on the other
- 17 witnesses.
- 18 CO-HEARING OFFICER DODUC: Okay. I would
- 19 expect Mr. Jackson and others to have cross-examination
- 20 as well.
- 21 Miss Des Jardins.
- 22 MS. DES JARDINS: I just wanted to say that
- 23 having a lot of oral testimony in the record on . . .
- 24 written testimony that's . . . that could be stricken,
- 25 you know, it's -- are we then supposed to -- also

1 supposed to make motions to strike that testimony, and

- 2 when would the transcript be available?
- 3 It just -- It makes -- I think that the
- 4 Hearing Officers' ruling postponing presentation of the
- 5 panel until they consider whether to strike the written
- 6 testimony -- because if the written testimony is
- 7 stricken, they shouldn't be presenting oral testimony
- 8 on it.
- 9 And my understanding is -- I don't know how
- 10 the Hearing Officer would deal with the issue of the
- 11 oral testimony on -- on any test -- on any testimony
- 12 that was stricken, and it creates an issue.
- 13 CO-HEARING OFFICER DODUC: Thank you,
- 14 Miss Des Jardins.
- 15 And before you comment, Mr. Berliner, I will
- 16 note that, while in the past we have allowed for
- 17 witnesses to proceed while considering motions to
- 18 strike, those have been very discrete motions with
- 19 specific sections or portions at nowhere near the level
- 20 to which these motions are before us, to strike
- 21 basically the entirety of three -- well, two witnesses,
- 22 and I'm not sure about the third.
- 23 So that's an extensive length of testimony and
- 24 cross-examination that we will be considering through
- 25 these motions. So it is different than our previous

1 allowing of witnesses to proceed pending consideration

- 2 of Motions to Strike.
- But, Mr. Berliner, did you have anything else
- 4 to add?
- 5 MR. BERLINER: Yes.
- 6 I understand that, but -- but it does raise
- 7 the same issue, which is that testimony is tentatively
- 8 allowed and is then going to be struck, so the
- 9 transcript would have to reflect that.
- 10 And, in response to Ms. Des Jardins' concern,
- 11 I would assume that a Motion to Strike the written
- 12 testimony would then equally apply to whatever oral
- 13 testimony is -- is --
- 14 CO-HEARING OFFICER DODUC: Yes.
- 15 MR. BERLINER: -- submitted upon
- 16 cross-examination, so --
- 17 CO-HEARING OFFICER DODUC: Yes.
- 18 MR. BERLINER: -- it's an across-the-board
- 19 motion.
- 20 CO-HEARING OFFICER DODUC: That is my
- 21 understanding as well, of course, considering the
- 22 efficiency of the amount of time that would be needed
- 23 for direct as well as cross of those three witnesses.
- 24 But we will take your request under
- 25 consideration. We can definitely say that do not

- 1 expect those witnesses to come tomorrow. We will give
- 2 you any further indication tomorrow, but we will not
- 3 plan to hear from them tomorrow.
- 4 MR. BERLINER: Okay. Thank you very much.
- 5 CO-HEARING OFFICER DODUC: All right.
- 6 Miss Nikkel's not here.
- 7 Oh, Miss Nikkel is here.
- 8 Miss Nikkel.
- 9 MS. NIKKEL: I am here.
- 10 Given the scheduling uncertainties, I think
- 11 I'm just going to proceed here with my cross and see
- 12 what happens. All sorts of moving schedules here.
- 13 CROSS-EXAMINATION BY
- 14 MS. NIKKEL: Okay. Good afternoon. I'm
- 15 Meredith Nikkel. I'm here on behalf of the Sacramento
- 16 Valley Group, the Tehama-Colusa Canal Authority, and
- 17 the North Delta Water Agency.
- 18 I just have a few brief questions for
- 19 Dr. Earle.
- 20 And, Dr. Earle, these questions arise out of
- 21 your expertise on the Adaptive Management Plan which
- 22 was referenced in DWR Exhibit 1143, the Second Revised.
- 23 And, specifically, I'm referring to
- 24 Footnote 38. If Mr. Long could bring that up.
- 25 (Exhibit displayed on screen.)

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1 MS. NIKKEL: Thank you. That's fine. It's
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- 2 pretty long.
- 3 So, Dr. Earle, are you familiar with this
- 4 footnote?
- 5 WITNESS EARLE: (Examining document.)
- 6 Mr. Long, would you please scroll up a little
- 7 more?
- 8 (Scrolling through document.)
- 9 WITNESS EARLE: (Examining document.)
- 10 And would you please scroll back down to the
- 11 footnote?
- 12 (Scrolling through document.)
- 13 WITNESS EARLE: I'm sorry. I don't recall
- 14 where this appears in the Adaptive Management Plan.
- MS. NIKKEL: So, as you sit here today,
- 16 Dr. Earle, is it -- do you have any opinion as to
- 17 whether the Adaptive Management Program would require
- 18 the Petitioners to return to the State Water Board to
- 19 prove that a change to the Spring Outflow Criteria
- 20 contained in the Incidental Take Permit would not
- 21 result in injury to other water users?
- 22 WITNESS EARLE: I do not have an opinion
- 23 regarding whether a proposed change conducted under the
- 24 adaptive management criteria would have any particular
- 25 regulatory or procedural consequences. That would be

1 determined on the basis of the potential effects of the

- 2 proposed change.
- 3 MS. NIKKEL: But within the Adaptive
- 4 Management Plan itself, there's no requirement under
- 5 the Plan itself to return to the State Water Board; is
- 6 that correct?
- 7 WITNESS EARLE: No. The Plan itself, as I
- 8 noted in my testimony in March, addresses these issues
- 9 under Step 4, which involves implementation of proposed
- 10 adaptive management change, at which point, as always,
- 11 the Department is required to comply with all
- 12 applicable restricts -- restrictions and regulations.
- MS. NIKKEL: So if, as suggested by this
- 14 footnote, there were an alternative operation for
- 15 spring outflow that would be developed somehow between
- 16 DWR and CDFW, would the Adaptive Management Plan
- 17 require DWR to come back to the State Water Board for a
- 18 change to its water rights?
- 19 MR. BERLINER: Objection: The witness just
- 20 responded that he's unaware as to what would cause
- 21 return to the Water Board.
- 22 CO-HEARING OFFICER DODUC: Sustained.
- He doesn't know, Miss Nikkel.
- 24 MS. NIKKEL: I have -- I understood his
- 25 testimony to be that there was a step in the Adaptive

- 1 Management Plan that might apply, and so I'm asking
- 2 about a specific way in which the Adaptive Management
- 3 Plan might apply.
- 4 That was my understanding, was that Step 4 had
- 5 a role or some interaction that could -- or requirement
- 6 that could entail a change to a water right or impacts
- 7 analysis. And I'm trying to understand how that would
- 8 play with respect to this footnote.
- 9 CO-HEARING OFFICER DODUC: Are you able to
- 10 answer, Dr. Earle?
- 11 WITNESS EARLE: As I stated, the
- 12 implementation occurring under Step 4 of the Adaptive
- 13 Management Plan would be required to comply with all
- 14 applicable restraints and regulations.
- 15 Naturally, those would depend upon the
- 16 specific proposal that is being put forth.
- 17 CO-HEARING OFFICER DODUC: But her --
- 18 What was your question again, Miss Nikkel?
- 19 MS. NIKKEL: Well, my question was -- And I
- 20 don't have a specific proposal, so the answer may be
- 21 that it depends on a specific proposal.
- 22 But in the footnote, it implies or suggests
- 23 that there could be a change to spring outflow or an
- 24 alternative operation for spring outflow that could be
- 25 developed between CDFW and the Department.

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1 And my question is, How would Step 4 -- How
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- 2 would the adaptive management apply in that instance to
- 3 whether or not there would be a change to the
- 4 Department's water rights?
- 5 CO-HEARING OFFICER DODUC: I see.
- 6 WITNESS EARLE: The Adaptive Management Plan
- 7 does not specifically prescribe the applications,
- 8 permit processes, or otherwise that might be required
- 9 for any change proposed under adaptive management.
- 10 So, the procedure, in the event that the
- 11 circumstances described in -- in Footnote 38 were to
- 12 come to pass, is not specified in the Adaptive
- 13 Management Plan.
- MS. NIKKEL: Okay. Thank you. That's all I
- 15 have.
- 16 CO-HEARING OFFICER DODUC: Thank you,
- 17 Miss Nikkel.
- 18 Miss Meserve.
- 19 (Pause in proceedings.)
- MS. MESERVE: Good afternoon.
- 21 I have questions for Dr. Earle based on his --
- 22 the subjects that are in his testimony, such as noise,
- 23 loss of habitat, the transmission lines, basically
- 24 tracking the topics in his testimony.
- 25 CO-HEARING OFFICER DODUC: Speak more clearly

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1 into the microphone and bring it closer to you,
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- 2 Miss Meserve.
- 3 MS. MESERVE: Sure.
- 4 CROSS-EXAMINATION BY
- 5 MS. MESERVE: Let's see.
- 6 So, Dr. Earle, your testimony -- And maybe we
- 7 could just go ahead and put that up -- is DWR-1219.
- 8 And the first question I have relates to
- 9 Page 6, Line 11.
- 10 (Exhibit displayed on screen.)
- MS. MESERVE: And this is where you cite the
- 12 Popper study.
- 13 And my question is: Is it your position that
- 14 consideration of noise frequency would not have
- 15 improved the analysis you relied on in the Final EIR of
- 16 noise?
- 17 WITNESS EARLE: That is correct.
- MS. MESERVE: And I have an exhibit which is
- 19 just an excerpt from the Final EIR, which is labeled
- 20 FSL-54 in the thumb drive I provided this morning. If
- 21 you could please bring that up.
- 22 (Exhibit displayed on screen.)
- MS. MESERVE: No. It says FSL-54.
- 24 (Exhibit displayed on screen.)
- MS. MESERVE: Yeah, that one.

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1 And are you familiar, Dr. Earle, with the
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- 2 Final EIR and what it states about the noise produced
- 3 by pile drivers here on Page 12-148?
- 4 WITNESS EARLE: I see that Line 4 indicates
- 5 that impact pile driving produces a sound level of
- 6 approximately 101 dBA at 50 feet distance.
- 7 And, yes, I'm familiar with that.
- 8 MS. MESERVE: And in preparing this rebuttal
- 9 testimony, you reviewed Dr. Shilling's testimony as
- 10 well as the study cited by him in LAND-135?
- 11 WITNESS EARLE: I do not recall exactly what
- 12 LAND-135 consists of.
- MS. MESERVE: That's his --
- 14 WITNESS EARLE: It's true that --
- MS. MESERVE: -- testimony.
- 16 WITNESS EARLE: -- I reviewed Dr. Shilling's
- 17 testimony.
- MS. MESERVE: Sorry.
- 19 Yeah, that's just his testimony.
- 20 WITNESS EARLE: Then, yes, I reviewed
- 21 Dr. Shilling's testimony.
- MS. MESERVE: Okay. And then one of the
- 23 citations within that is the Popper study that I
- 24 mentioned.
- 25 If we could please bring up LAND-148, which is

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1 that study. I may be misnaming it. It's Dooling and
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- 2 Popper. LAND-148, and go to Page 35.
- 3 And I am going to point you toward language
- 4 about intermittent sounds that are similar to pile
- 5 driving.
- 6 (Exhibit displayed on screen.)
- 7 MS. MESERVE: And if we could go to Page 35 of
- 8 that.
- 9 (Exhibit displayed on screen.)
- 10 MS. MESERVE: Scrolling down into the third
- 11 full paragraph.
- 12 (Exhibit displayed on screen.)
- MS. MESERVE: It discusses noise from
- 14 aircraft, and pile driving may be similar.
- 15 And with respect to the comparison -- Well,
- 16 I'll give you a chance to read. Sorry.
- 17 (Pause in proceedings.)
- 18 WITNESS EARLE: You may proceed.
- 19 MS. MESERVE: And if we could look at another
- 20 exhibit I gave you this morning, which is FSL-55, which
- 21 is a listing of different noise levels.
- In the last excerpt we looked at, aircraft
- 23 noise was --
- 24 (Exhibit displayed on screen.)
- MS. MESERVE: -- mentioned.

1 Are you aware that aircraft noise is around

- 2 97 decibels?
- 3 WITNESS EARLE: I am aware that the amount of
- 4 noise produced by any source varies quite substantially
- 5 with distance from the source.
- 6 So, 97 decibels, if that appears in this
- 7 exhibit -- I don't see it at the moment -- is only a
- 8 meaningful number if presented in the context of THE
- 9 distance at which it is measured.
- 10 MS. MESERVE: Understood.
- 11 If it was at the correct distance, would you
- 12 agree that aircraft sounds could be analogous to
- 13 pile-driving sounds in the point that they would be
- 14 intermittent?
- 15 WITNESS EARLE: I . . . Acoustically,
- 16 aircraft sounds and pile-driving sounds are very
- 17 different.
- 18 Aircraft sounds typically grow gradually as
- 19 the plane approaches, have a peak level and then
- 20 diminish as the plane goes away.
- 21 Pile-driving sounds are almost instantaneous
- 22 in going from no noise to maximum noise, and also at a
- 23 very rapid cessation.
- 24 These differences account for substantial
- 25 behavioral differences in animals that are exposed to

- 1 those sounds.
- 2 MS. MESERVE: So would you also agree that
- 3 highway noise would be a lot different from
- 4 pile-driving noise?
- 5 WITNESS EARLE: Yes. Highway noise is
- 6 generally continuous, and it also has a different
- 7 attenuation with distance compared to pile-driving
- 8 noise, because highway noise is essentially a linear
- 9 noise source whereas pile-driving noise is point source
- 10 in most cases.
- 11 (Pause in proceedings.)
- MS. MESERVE: So, looking at your testimony at
- 13 Page 6, don't you appear to be equating, on Lines 13
- 14 and 14, highway noise with pile-driving noise in a way
- 15 that --
- 16 (Exhibit displayed on screen.)
- MS. MESERVE: -- would not be appropriate?
- 18 WITNESS EARLE: I would say no. I appear to
- 19 be quoting Dooling and Popper with regard to their
- 20 analysis of frequency effects.
- 21 Ah. It may be that you misunderstood my use
- 22 of the word "frequency."
- 23 I'm -- The term "frequency" here is not
- 24 intended to mean how often something happens but to
- 25 indicate how many cycles per second the sound is

- 1 produced at.
- 2 (Pause in proceedings.)
- 3 MS. MESERVE: So -- But do you still think
- 4 that highway noise would be relevant to consideration
- 5 of the pile-driving noise as was assumed in the EIR?
- 6 WITNESS EARLE: The two are relevant.
- 7 The -- The analysis in the EIR considered the
- 8 distance at which a noise would be expected to
- 9 attenuate to approximately background or, specifically,
- 10 they used a threshold of 50 dBA, which is a common
- 11 background level of noise in rural areas within the
- 12 Delta, as demonstrated by measurements.
- And in that case, at that distance, we're
- 14 talking about a noise which does not actually exceed
- 15 background, and at smaller distances -- somewhat
- 16 smaller distances, it only exceeds background by a
- 17 small amount.
- 18 At such distances, pile-driving noise, highway
- 19 noise and, indeed, any source of noise are comparable
- 20 in having a very low intensity and, consequently, a low
- 21 potential to affect the behavior of animals.
- 22 MS. MESERVE: Doesn't the FEIR describe that
- 23 pile driving could be 101 dBA, though?
- 24 WITNESS EARLE: That is correct.
- 25 101 dBA at 50 feet, I believe, that would drop

1 by approximately 60 BA for every time you doubled the

- 2 distance from the noise source.
- 3 I believe it comes out to about half a mile at
- 4 which pile-driving noise would be indistinguishable
- 5 from background noise.
- 6 MS. MESERVE: And using that example, wouldn't
- 7 there be birds closer than a half mile to the
- 8 pile-driving noise --
- 9 WITNESS EARLE: Yes --
- 10 MS. MESERVE: -- in the Delta.
- 11 WITNESS EARLE: -- there certainly could and
- 12 this is why the Final EIS expresses the opinion that
- 13 such birds could be behaviorally affected by exposure
- 14 to that noise.
- MS. MESERVE: And then you agree that the
- 16 pile-driving noise has a unique characteristic because
- 17 it is intermittent, right, as discussed in the
- 18 Final EIR?
- 19 WITNESS EARLE: Among other things, yes, it is
- 20 intermittent.
- 21 MS. MESERVE: Which would be different than a
- 22 freeway noise, for instance, not intermittent; is it?
- 23 WITNESS EARLE: Freeway noises are typically
- 24 assumed to be fairly continuous in amplitude.
- MS. MESERVE: Have you heard of the -- here's

1 another intermittent noise -- the use of cannons for

- 2 bird control --
- 3 WITNESS EARLE: Yes.
- 4 MS. MESERVE: -- at landfills, for instance?
- 5 Could we look at another exhibit I had from
- 6 this morning, which is FSL-56, please.
- 7 (Exhibit displayed on screen.)
- 8 MS. MESERVE: And if we scroll to the next
- 9 page.
- 10 (Exhibit displayed on screen.)
- MS. MESERVE: This is just an example of a
- 12 Cannon used to disperse birds. It says they're fairly
- 13 effective as dispersing birds.
- 14 Would you agree that this kind of noise would
- 15 scare a bird?
- 16 MR. MIZELL: I'm going to object: This is
- 17 beyond the scope of Dr. Earle's rebuttal testimony.
- 18 Again, as he qualified it earlier in response
- 19 to Miss Meserve's question, the citation Miss Meserve
- 20 is questioning him about talks about frequency as in --
- 21 Well, I think Dr. Earle described it better than I
- 22 could.
- Not being a frequency in time but a frequency
- 24 in oscillation or something.
- 25 CO-HEARING OFFICER DODUC: In occurrence.

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1 MR. MIZELL: In -- Well, not in occurrence --
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- 2 not frequency in occurrence but frequency in --
- 3 CO-HEARING OFFICER DODUC: Yes. Not frequency
- 4 in occurrence.
- 5 MR. MIZELL: Right.
- 6 CO-HEARING OFFICER DODUC: That's right.
- 7 MR. MIZELL: So, at this point, I fail to see
- 8 the connection of this line of questioning to the
- 9 statement referenced in Dr. Earle's testimony.
- 10 CO-HEARING OFFICER DODUC: Miss Meserve?
- MS. MESERVE: Well, I think that the -- on
- 12 Page 6 and thereafter, we're talking about the
- 13 character of the noises that are analyzed and that
- 14 Dr. Earle is attempting to rebut statements made by
- 15 Dr. Shilling about the character of those -- of those
- 16 noises.
- So, I don't think it's -- I don't think
- 18 everything is tied to frequency. I think it's also
- 19 tied to the character of the noise, which I think is an
- 20 instantaneous short duration point.
- 21 CO-HEARING OFFICER DODUC: Okay. Overruled.
- MS. MESERVE: So I think I had a question
- 23 pending.
- 24 Would you agree that these types of cannon
- 25 shots could scare birds?

1 CO-HEARING OFFICER DODUC: And how does

- 2 this -- I'm sorry.
- 3 Make the connection to me -- for me of this
- 4 one example of a cannon. You're not asking him to
- 5 opine about the specific, you know, maker or model,
- 6 but -- So what is the -- what is the linkage here?
- 7 What characteristic you are going for?
- 8 MS. MESERVE: What I'm trying to do is provide
- 9 a more apt example of a noise that would be similar to
- 10 a pile driving, more similar, for instance, than a
- 11 freeway noise.
- 12 CO-HEARING OFFICER DODUC: Okay. Are you
- 13 familiar with these type of cannons, Dr. Earle?
- 14 WITNESS EARLE: I am aware that cannons of
- 15 this type have been used to -- to drive -- to haze
- 16 birds that are in undesirable situations. They're used
- 17 at airports and golf courses, for instances, to
- 18 typically keep waterfowl away from areas where they
- 19 could either be an inconvenience or a safety hazard.
- 20 And I'm aware that, if used consistently and
- 21 at short distances, they can be effective in
- 22 eliminating birds from a local area.
- 23 I would note --
- 24 CO-HEARING OFFICER DODUC: And how would their
- 25 noise compare to that of the . . .

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1 WITNESS EARLE: It is similar to the noise of
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- 2 a pile driver in the sense it has a very rapid rise
- 3 time, a very rapid fall time. And it has been found to
- 4 elicit a startle response from birds.
- 5 But it's important to note that it has to be
- 6 loud to work; in other words, it has to be close to the
- 7 bird.
- 8 Similarly, pile driving would have to be -- a
- 9 bird would have to be quite close to the pile driving
- 10 to be disturbed by this sort of phenomena.
- 11 (Pause in proceedings.)
- MS. MESERVE: So would you agree, then -- I
- 13 think you already did -- that the intermittent noise
- 14 characteristic of the pile driving is -- differs
- 15 substantially from busy roads, residential areas and
- 16 agricultural equipment referenced in your testimony?
- 17 WITNESS EARLE: If we could please pull up my
- 18 testimony. I'm not quite certain what terminology
- 19 you're referring to.
- 20 (Exhibit displayed on screen.)
- 21 MS. MESERVE: I think it's on Page 6. Let me
- 22 find it.
- 23 (Pause in proceedings.)
- MS. MESERVE: Line 16 of Page 7 -- sorry --
- 25 (Exhibit displayed on screen.)

- 2 "Most of the Delta's already subject
- 3 to noise . . . "
- 4 (Pause in proceedings.)
- 5 WITNESS EARLE: I see this.
- 6 Would you please repeat your question?
- 7 MS. MESERVE: Given that pile drivers have a
- 8 unique intermittent noise characteristic, as described
- 9 in the EIR, don't sounds from pile driving differ
- 10 substantially from busy roads, residential areas, and
- 11 agricultural equipment mentioned on Page 7 of your
- 12 testimony?
- 13 WITNESS EARLE: I have not reviewed the
- 14 acoustic data that have been collected in this area. I
- 15 would say that they probably do differ appreciably from
- 16 busy roads.
- 17 Residential areas, it's harder to say, but
- 18 typically residential areas have relatively low rates
- 19 of noise production.
- 20 Agricultural equipment, the -- The noise
- 21 produced by such equipment is highly variable depending
- 22 upon the equipment in question.
- 23 As to the question whether, for instance, as
- 24 it says here, Sandhill Cranes and other species are
- 25 accustomed to the noise from pile driving or noise

1 that's comparable to that, it would be speculative

- 2 to -- for me to conclude at this time.
- 3 MS. MESERVE: So you're not aware of noises
- 4 similar to the pile-driving noise that you're opining
- 5 about already being present in the Delta; are you?
- 6 WITNESS EARLE: I'm sure pile-driving noises
- 7 are occasionally present in the Delta.
- 8 But we did not specifically evaluate differing
- 9 bird responses to pile driving as opposed to other
- 10 noises because, as I stated earlier, we concluded that
- 11 there was a potential impact any time the noise was
- 12 appreciably in excess of the acoustic background.
- 13 The determination in the EIR/EIS was that, in
- 14 spite of that, there would still be a
- 15 less-than-significant effect.
- Most of the areas that would be exposed to
- 17 relatively loud noises -- and, by that, I mean greater
- 18 than maybe 70 or 80 decibels -- would actually be
- 19 within the construction areas, areas that have already
- 20 been cleared and where birds would be absent.
- 21 So very few birds could be exposed to noises
- 22 as high as those generated by pile driving, except
- 23 perhaps for birds that were located on the river next
- 24 to where the pile driving was occurring. And that's a
- 25 relatively low level of sonification.

1 The birds affected by that process do not

- 2 belong to sensitive species and, therefore, it was
- 3 concluded that it did not represent a significant
- 4 adverse effect.
- 5 MS. MESERVE: So, in your analysis, did you
- 6 equate the lack of a significant adverse effect with
- 7 what I think you phrased as reasonable protection for
- 8 wildlife?
- 9 WITNESS EARLE: Well, as I stated in my
- 10 testimony in March, my opinion that the California
- 11 WaterFix would be reasonably protective of wildlife is
- 12 based not only upon my own analysis and the analysis
- 13 presented in the various environmental documents, but
- 14 also on the concurrence with that analysis that we've
- 15 received from the various agencies whose jurisdiction
- 16 is protection of fish and wildlife in California,
- 17 essentially agreeing with our analysis.
- 18 MS. MESERVE: Was there any analysis of
- 19 reasonable protection for Greater Sandhill Cranes in
- 20 the ITP?
- 21 WITNESS EARLE: The ITP is an incidental take
- 22 statement that authorizes take of species that are
- 23 listed under the California Endangered Species Act.
- 24 The Greater Sandhill Crane is a fully
- 25 protected species. There is no authorization of take

- 1 for this species unless, under the isolated
- 2 circumstance of preparing a natural Community
- 3 Conservation Plan which is not relevant in this case.
- 4 Therefore, there is no mention anywhere in the
- 5 Incidental Take Permit of the Greater Sandhill Crane.
- 6 MS. MESERVE: So there -- So the answer is,
- 7 no, there's no one else; correct?
- 8 WITNESS EARLE: There's no reference to it in
- 9 the Incidental Take Permit.
- 10 MS. MESERVE: So at least with respect to
- 11 Sandhill Crane -- Greater Sandhill Crane, your prior
- 12 statement would not apply; correct?
- MR. BERLINER: Objection: Vague.
- 14 CO-HEARING OFFICER DODUC: I'm sorry. Which
- 15 prior statement is that?
- 16 MS. MESERVE: The statement that the permits
- 17 obtained by the Project would have analyzed effects on
- 18 birds from a --
- 19 WITNESS EARLE: On the contrary. The Greater
- 20 Sandhill Crane is evaluated at length in the
- 21 Final EIR/EIS, which was reviewed and commented on by
- 22 all of the fish and wildlife agencies, and which was
- 23 nominally authored by the U.S. Fish and Wildlife
- 24 Service.
- MS. MESERVE: That's not a permit; is it?

- 1 WITNESS EARLE: An authorization.
- 2 But I -- I do not pretend to understand the
- 3 legal niceties here.
- 4 MS. MESERVE: Okay. Well, I just want to be
- 5 clear: There's no permit.
- 6 And there is no Federal Record of Decision
- 7 with respect to the EIR/EIS, either; is there?
- 8 WITNESS EARLE: It's my understanding that
- 9 that has not yet been issued.
- 10 MS. MESERVE: Now, on the issue of
- 11 transmission line markers and their effectiveness --
- 12 and that's discussed on Page 15 of your testimony.
- 13 (Exhibit displayed on screen.)
- MS. MESERVE: And, let's see, you discuss that
- 15 there's an addendum was issued that would -- with the
- 16 effect of a substantial reduction in the proposed
- 17 length of the transmission lines.
- Do you see that part of your testimony?
- 19 WITNESS EARLE: Yes, I do.
- MS. MESERVE: If we could go to an exhibit
- 21 that is within FSL, and that's FSL-48, Page 2.
- 22 And this is an example of the new proposed
- 23 transmission lines and --
- 24 CO-HEARING OFFICER DODUC: Do you mean FSL-58?
- MS. MESERVE: I'm sorry. It's 48.

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1 I'm sorry. FSL-48. It's something that's in
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- 2 our existing Exhibit List. Sorry about that.
- 3 (Pause in proceedings.)
- 4 MS. MESERVE: 48. FSL-48.
- 5 (Pause in proceedings.)
- 6 MS. MESERVE: I think we're going to have to
- 7 go under the Friends of Stone Lakes. If you scroll
- 8 down toward the bottom.
- 9 There you go.
- 10 (Exhibit displayed on screen.)
- 11 MS. MESERVE: And this is an exhibit -- If we
- 12 could go to Page 2 of that.
- 13 (Exhibit displayed on screen.)
- MS. MESERVE: We discussed earlier that this
- 15 is similar to the proposed transmission lines that are
- 16 discussed in your testimony on Page 15 as being subject
- 17 to the addendum.
- 18 MR. MIZELL: I'm going to object:
- 19 We have a line of questioning here that goes
- 20 to an exhibit that is not directly responsive to
- 21 Dr. Earle's testimony.
- 22 His testimony on this point focuses on a
- 23 critique of modeling and is not discussing the
- 24 characterization of the transmission line polls and
- 25 lines.

- 1 If Miss Meserve can provide us a closer
- 2 citation, I'm happy to withdraw that objection.
- 3 CO-HEARING OFFICER DODUC: Actually, I don't
- 4 even know yet what her question is.
- 5 MS. MESERVE: Yeah. I mean, my questions go
- 6 to this paragraph on Page 15 of Dr. Earle's testimony
- 7 that talks about a substantial reduction in the
- 8 proposed length.
- 9 And what my questions go to is, well, what
- 10 about the character, not just the length? And that's
- 11 what my questions go to. So I believe it's within the
- 12 testimony in terms of availability for questioning.
- 13 CO-HEARING OFFICER DODUC: And, Miss Meserve,
- 14 are you focused solely on Dr. Earle's testimony on
- 15 Page 15, that one paragraph?
- 16 (Pause in proceedings.)
- MS. MESERVE: That was what I thought was most
- 18 direct.
- 19 I can look for some other citations if you'd
- 20 like.
- 21 CO-HEARING OFFICER DODUC: And, Mr. Mizell --
- 22 Let me ask Dr. Earle:
- 23 Dr. Earle, your testimony, as we see here, is
- 24 it based solely on a modeling analysis?
- 25 WITNESS EARLE: I beg your pardon? Based

- 1 solely on which analysis?
- 2 CO-HEARING OFFICER DODUC: On a modeling
- 3 analysis.
- 4 WITNESS EARLE: My testimony refers to
- 5 modeling but it also refers to substantial changes in
- 6 the Project as proposed, and also to various research
- 7 that was performed.
- 8 MR. MIZELL: I was looking beyond the first
- 9 paragraph. The first paragraph speaks solely in terms
- 10 of laugh and that -- no other characteristics.
- 11 The remainder of this section speaks to a
- 12 critique of the modeling presented by Protestants. I'm
- 13 not aware of anyplace that discusses other
- 14 characteristics of the transmission lines much as
- 15 Miss Meserve just indicated.
- Dr. Earle's testimony is limited to length.
- 17 CO-HEARING OFFICER DODUC: Miss Meserve.
- MS. MESERVE: Well, I think I can make these
- 19 into questions about the modeling if that would be
- 20 helpful.
- 21 CO-HEARING OFFICER DODUC: Let's do that.
- MS. MESERVE: Okay. So, if we could go back
- 23 to the figure in FSL-48, please.
- 24 (Exhibit displayed on screen.)
- 25 MS. MESERVE: The modeling -- If we go --

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1 scroll up to Page 1 of this --
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- 2 (Exhibit displayed on screen.)
- 3 MS. MESERVE: -- would have assumed
- 4 transmission lines -- or, rather, distribution lines
- 5 that look like the one on the bottom of this page,
- 6 wouldn't they, Dr. Earle?
- 7 MR. MIZELL: Objection: Assumes facts not in
- 8 evidence.
- 9 CO-HEARING OFFICER DODUC: Dr. Earle, are you
- 10 able to answer the question based on your knowledge?
- 11 WITNESS EARLE: I know that the -- the
- 12 proposed power transmission lines that are described in
- 13 the addendum do not resemble those shown in the
- 14 photograph there.
- 15 MS. MESERVE: So, given your understanding of
- 16 the model that you discuss on Page 15, isn't it true
- 17 that the -- the model is assuming lines that are
- 18 distribution lines with a single layer of lines as
- 19 shown in the bottom here?
- 20 WITNESS EARLE: Mmm . . . If Mr. Long would
- 21 bring us back to my testimony, Page 15, DWR-1219.
- 22 (Exhibit displayed on screen.)
- 23 WITNESS EARLE: Now, if you would please
- 24 scroll up a little bit.
- 25 (Scrolling through document.)

- 1 WITNESS EARLE: Or, sorry, scroll down.
- 2 (Scrolling through document.)
- 3 WITNESS EARLE: Okay. This discusses a model
- 4 that was developed by Dr. Ivey for the BDCP. This is
- 5 actually the model that is referred to by Protestants.
- 6 This is -- This is not the model that -- that
- 7 I advocate the use of in my testimony.
- 8 (Pause in proceedings.)
- 9 MS. MESERVE: Let's see. Well, I think we
- 10 went over this some before.
- 11 I just -- When I reviewed your testimony, it
- 12 appeared you weren't taking account on Page 15 of the
- 13 different configuration which is suggested in the
- 14 addendum, which is the power line -- the transmission
- 15 line with the distribution underbuild as shown in
- 16 FSL-48, Page 2.
- 17 MR. MIZELL: And I object to the question as
- 18 being beyond the scope.
- 19 In the question as Miss Meserve has phrased
- 20 it, she says it is not within his testimony. So I
- 21 believe that this is beyond the scope of Dr. Earle's
- 22 rebuttal testimony.
- 23 Unless we can find a reference to other
- 24 characteristics of the transmission lines, it's beyond
- 25 the scope.

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1
             MS. MESERVE: I'll just go to the . . .
             When you discuss -- I'll move on.
 2
             CO-HEARING OFFICER DODUC: You're moving on.
 3
 4
    Okay.
 5
             MS. MESERVE: Sorry.
             When you on Page 15, Line 11, refer to the
 6
    reduction in the proposed length of new transmission
 7
    lines, you don't offer any analysis about a different
 8
    configuration of transmission lines with underbuilds in
 9
   that; do you?
10
11
                    (Pause in proceedings.)
12
             WITNESS EARLE: That is correct.
13
             MS. MESERVE: And on Line 12, you state that
    the addendum would only further reduce collision risks
14
15
    for birds.
16
             But isn't it true that, if the power line is
    a -- is a dis -- is a transmission line with an
17
    underbuild with several layers of lines, that that
18
   might increase risks?
19
20
                    (Pause in proceedings.)
21
             MR. MIZELL: I'm going to object as being
    beyond the scope of his rebuttal testimony.
22
             His --
23
24
             MS. MESERVE: He --
25
             MR. MIZELL: -- conclusion here goes to the
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- 1 reduction in length.
- 2 CO-HEARING OFFICER DODUC: So your conclusion
- 3 is limited to just the analysis of length?
- 4 WITNESS BRADBURY: I think I can add some
- 5 clarity here.
- If we can go back to FSL-48, please.
- 7 (Exhibit displayed on screen.)
- 8 WITNESS BRADBURY: Existing power lines on
- 9 Lambert Road between River Road and I-5, those are
- 10 distribution lines.
- 11 The lines that we are modifying along Lambert
- 12 Road are actually 69 kV lines. They're single-pole
- 13 kV -- 69 kV lines and we're going to make them
- 14 double-pole 69 kV lines.
- So if you go down -- scroll down a bit.
- 16 (Exhibit displayed on screen.)
- 17 WITNESS BRADBURY: So this is a figure. This
- 18 actually is not what the transmission lines will look
- 19 like because it has one very specific problem.
- 20 But right now, the 69 kV lines that run along
- 21 Lambert Road are basically that same configuration but
- 22 with the six . . . the six wire holders. On the top
- 23 part of the transmission poll, there's only three, so
- 24 there's three on one side.
- We will rebuild the existing lines so that

- 1 there's three on one side and three on the other side.
- 2 So, basically, the configuration is adding
- 3 another set of three. It's approximately the same
- 4 height and it does have a kV underbuild.
- 5 I think it's also important to note that this
- 6 particular transmission line has a shield wire at the
- 7 top of the pole. The poles that will be used by SMUD
- 8 do not have that shield wire.
- 9 That's important because a number of studies
- 10 have found that the shield wire is particularly
- 11 problematic from a bird strike issue.
- 12 And one of the -- I believe it was Brown,
- 13 et al., found that roughly 65 percent of bird strikes
- 14 are on the shield wire.
- So, again, our transmission lines will not
- 16 have that shield wire. And it'll be basically that
- 17 same configuration except that it'll have six wires
- 18 attached to it instead of just three.
- 19 WITNESS EARLE: And I'd also note that on
- 20 Page 18 of my testimony, DWR-1219 --
- 21 (Exhibit displayed on screen.)
- 22 WITNESS EARLE: -- Number 4 on Page 18.
- 23 (Exhibit displayed on screen.)
- 24 WITNESS EARLE: A little -- Scroll down a
- 25 little farther.

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1
             (Scrolling through document.)
             CO-HEARING OFFICER DODUC: Reiterates those
 2
 3
   points that were just made by Mr. Bradbury.
             MS. MESERVE: So, Mr. Bradbury, is it your
 5
   contention, then, there is already a 69 kV transmission
    line going all the way down Lambert Road?
 б
 7
             WITNESS BRADBURY: The part that we will have
   reconstructed, yes, that's correct.
 8
 9
             MS. MESERVE: Is there any . . . figures you
   could point to that show that?
10
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- 11 WITNESS BRADBURY: Can you -- Let's see.
- 12 (Pause in proceedings.)
- 13 WITNESS BRADBURY: In the addendum . . .
- MS. MESERVE: That's going to be a DWR
- 15 exhibit; right?
- 16 WITNESS BRADBURY: DWR-1295.
- 17 (Exhibit displayed on screen.)
- 18 WITNESS BRADBURY: And as you scroll down.
- 19 (Scrolling through document.)
- 20 (Pause in proceedings.)
- 21 WITNESS BRADBURY: Oh, hold on a second.
- MS. MESERVE: There's a figure on Page 3.
- 23 WITNESS BRADBURY: There's -- I think in the
- 24 description, it talks about how the existing line --
- 25 what the existing line is and how it will be modified.

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1 (Pause in proceedings.)
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- WITNESS BRADBURY: I'm not seeing that.
- 3 (Pause in proceedings.)
- 4 WITNESS BRADBURY: I'm sorry. I'm not seeing
- 5 that right now.
- 6 MS. MESERVE: I'm not aware -- We can move on.
- 7 I just -- From my experience, I did go Lambert Road and
- 8 I did take that picture, and that's the trans -- that's
- 9 the distribution lines I found, and so I was a little
- 10 confused by your statement.
- 11 WITNESS BRADBURY: That distribution line that
- 12 you took a picture of is actually on the other side of
- 13 the bridge.
- 14 CO-HEARING OFFICER DODUC: Can you tie this
- 15 back to Dr. Earle's testimony somehow?
- I thought it was interesting, but --
- 17 MS. MESERVE: I know. Sorry.
- 18 There's a factual issue about what the
- 19 existing line is now and what's being replaced, because
- 20 Dr. Earle is claiming that the change is a reduction in
- 21 length that will serve to only further reduce
- 22 collision. And that's why I'm trying to discover that.
- 23 CO-HEARING OFFICER DODUC: And I believe
- 24 Mr. Bradbury's explanation was intended to support that
- 25 finding in Dr. Earle's testimony.

- 1 WITNESS BRADBURY: That's correct.
- MS. MESERVE: And I guess for the detail of
- 3 what's there now versus what's proposed, the best
- 4 reference we have would be this DWR exhibit. And so I
- 5 can study that again later.
- 6 Let's go to the issue of diverters, then.
- 7 On Page 18, Line 23 of your testimony,
- 8 Dr. Earle, you discuss that the collision risk would be
- 9 lowered by 60 percent.
- 10 (Exhibit displayed on screen.)
- MS. MESERVE: Do you see that?
- 12 WITNESS EARLE: Yes.
- MS. MESERVE: And is it your opinion that
- 14 installing flight diverters on power lines is highly
- 15 effective at averting collisions?
- 16 WITNESS EARLE: As stated there, they have
- 17 been found to reduce the incidence of collisions by
- 18 approximately 60 percent.
- 19 MS. MESERVE: And in making that assertion and
- 20 citing the Yee study, which is at SOSC-59, that you're
- 21 relying on the Yee study from 2008; is that correct?
- 22 WITNESS EARLE: I do cite the Yee study in
- 23 support of that conclusion. That is not the -- the
- 24 only study that has evaluated this. Comparable numbers
- 25 have been found by other studies, such as the -- the

1 Brown and Drewien cited in the testimony presented by

- 2 Save Our Sandhill Cranes.
- 3 MS. MESERVE: And just sticking with the Yee
- 4 study for now, that studied the effectiveness of flight
- 5 diverters on power lines that had only one layer of
- 6 horizontal lines; isn't that correct?
- 7 WITNESS EARLE: I don't know. We would have
- 8 to -- to look at the Yee study to determine that.
- 9 MS. MESERVE: That's SOSC-59, Page 14.
- 10 (Pause in proceedings.)
- 11 MS. MESERVE: And my question is: Isn't it
- 12 true that those transmission lines in the study would
- 13 look more like the photo I took?
- 14 If we look at Page 14 and see there's --
- 15 Whoops. SOSC-59. That's going to be at the bottom of
- 16 your Exhibit List there.
- 17 And then 59.
- 18 (Exhibit displayed on screen.)
- 19 MS. MESERVE: And then if you scroll to .pdf
- 20 Page 28.
- 21 (Exhibit displayed on screen.)
- 22 MS. MESERVE: So that was the lines studied in
- 23 Yee; right?
- 24 WITNESS EARLE: Yes.
- 25 MS. MESERVE: So --

- 1 WITNESS EARLE: I'm not sure if I'd call
- 2 that -- That's a very vague picture. But it appears to
- 3 have a groundwater or a shield wire located above the
- 4 conductors.
- 5 MS. MESERVE: Would you say it's more similar
- 6 to the photo I took on Lambert Road than what I had on
- 7 Page 2 of FSL-48?
- 8 WITNESS EARLE: Yes.
- 9 MS. MESERVE: And looking at that
- 10 configuration, in the example that I provide in FLS-48,
- 11 Page 2, which is the transmission line with the
- 12 underbuild, wouldn't you agree that this is different
- 13 in shape than the single layer used in the Yee study?
- 14 WITNESS EARLE: Yes.
- MS. MESERVE: And since the Yee study was
- 16 based on a single layer of power lines, not the
- 17 multilayered lines that would be proposed, do you still
- 18 think that a 60 percent reduction with power line
- 19 collisions reported in Yee would still apply?
- 20 WITNESS EARLE: Yes.
- 21 As we noted earlier, the -- the majority of
- 22 the collisions in any case are on the shield wire,
- 23 which is both the highest and the thinnest wire in the
- 24 array.
- 25 The birds typically are thought to hit the

- 1 shield wire because they think they're flying above the
- 2 transmission wires, and then there's this very narrow
- 3 wire that they can't see that they hit.
- 4 I -- I think it is implausible from the point
- 5 of view of bird behavior that the bird would try to fly
- 6 between such an accumulation of wires such are shown in
- 7 this photograph.
- 8 MS. MESERVE: If it was at night or with fog,
- 9 wouldn't that lead to a -- more likelihood of the bird
- 10 hitting it without seeing it?
- 11 WITNESS EARLE: I agree it is possible to
- 12 conceive circumstances where there is a substantially
- 13 higher risk of birds hitting wires than -- than under
- 14 good visibility and clear skies.
- 15 MS. MESERVE: And then -- And are you aware
- 16 that there is more incidence of fog in the Delta than
- 17 in Colorado, for instance, where the Brown and Drewien
- 18 study was based?
- 19 WITNESS EARLE: May I remind you that it was
- 20 Gary Ivey who cited the Brown and Drewien study. The
- 21 Yee study was performed in the Delta.
- 22 MS. MESERVE: And the Yee study affirmed that
- 23 fog can reduce visibility and reduce flight diverter
- 24 effectiveness; doesn't it?
- 25 WITNESS EARLE: I -- I believe he -- he

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1 reached that in his conclusions, yes.
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- 2 MS. MESERVE: And sticking with the Yee
- 3 study --
- 4 Could we look at SOSC-59 again, please.
- 5 And -- Sorry. This is going a little slower
- 6 than I had anticipated. I'll try to keep things
- 7 moving, but I guess I would request an additional 15
- 8 minutes.
- 9 CO-HEARING OFFICER DODUC: Okay. But move
- 10 faster, Miss Meserve.
- MS. MESERVE: Sorry.
- Okay. FS -- SOSC-59, on Page -- .pdf Page 41.
- 13 (Exhibit displayed on screen.)
- 14 MS. MESERVE: And the part I want to look at
- 15 is the -- the fatalities not accounting for biases due
- 16 to searcher efficiency.
- 17 In the first paragraph there, if you could
- 18 take a look at that, Dr. Earle.
- 19 (Pause in proceedings.)
- 20 MS. MESERVE: So the report itself talks about
- 21 some of the limitations and that there was likely
- 22 underreporting; doesn't it?
- 23 (Pause in proceedings.)
- 24 WITNESS EARLE: Yes, it does.
- MS. MESERVE: And if there was a 60 percent

1 reduced mortality rate, as you allege, some birds --

- 2 some birds would still die; wouldn't they?
- 3 WITNESS EARLE: Yes. Yes. It is certainly
- 4 true that there is a -- there is a calculable
- 5 probability that birds would die under any
- 6 circumstances involving transmission lines and bird
- 7 flight.
- 8 MS. MESERVE: And that would include the
- 9 Greater Sandhill Crane, which is a fully protected
- 10 species as well; wouldn't it?
- 11 WITNESS EARLE: In principal, yes.
- 12 However, as I note in my testimony, the Yee
- 13 study found one Sandhill Crane, not a Greater Sandhill
- 14 Crane, just one Sandhill Crane which represent
- 15 approximately 15 years. Greater Sandhill Crane are
- 16 about 15 percent in the Delta. Found one bird killed
- 17 per year.
- 18 And even allowing for biases due to searcher
- 19 efficiency, scavenger removal, habitat and crippling,
- 20 that's a very small number of birds potentially
- 21 affected, especially when you consider the extremely
- 22 really small mileage of lines that are currently
- 23 proposed, since the issue of the addendum.
- We've calculated that, in all probability,
- 25 there would be no mortalities of Greater Sandhill

- 1 Cranes. But there is an extremely small possible to
- 2 that a mortality could occur at some point.
- 3 MS. MESERVE: And you've stated in your
- 4 testimony that the effectiveness of the bird diverters
- 5 is 60 percent -- right? -- not 99 percent.
- 6 WITNESS EARLE: That's correct.
- 7 MS. MESERVE: Moving on to the issue of the
- 8 Swainson's Hawk habitat.
- 9 In your testimony, you talk about -- Starting
- 10 on Page 19 --
- 11 (Exhibit displayed on screen.)
- MS. MESERVE: -- you respond to Dr. Fries' and
- 13 Mr. Pachl's testimony.
- 14 Are you aware that the Proposed Project
- 15 changes in the Supplemental EIR would increase the
- 16 amount of agricultural land that would be permanently
- 17 lost?
- 18 WITNESS EARLE: I think it would be helpful at
- 19 this point to bring up Chapter 12 of the Supplemental
- 20 EIR and -- and look at what those acreages are for
- 21 Sandhill Cranes.
- MS. MESERVE: I'm talking about Swainson's
- 23 Hawk.
- 24 WITNESS EARLE: Oh, sorry, Swainson's Hawk.
- MS. MESERVE: So that would be SWRCB-113,

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1
   Chapter 12, Page 37.
                    (Pause in proceedings.)
 2
             MS. MESERVE: Chapter 12 and then Page 37,
 3
    which has a table showing the habitat loss gained as a
   result of the Project changes.
 5
             (Exhibit displayed on screen.)
 6
 7
             MS. MESERVE: Page 37.
             (Exhibit displayed on screen.)
 8
 9
             WITNESS EARLE: Mr. Long, if you'd please
    scroll the page up a little.
10
11
             (Scrolling through document.)
12
             WITNESS EARLE: Or down, apparently.
13
             (Scrolling through document.)
14
             WITNESS EARLE: A bit more, please.
15
             (Scrolling through document.)
16
             WITNESS EARLE: That's very good. Thank you.
             So, as shown here, the -- the proposed changes
17
    described in the Administrative Draft Supplemental EIS
18
   would show an increase of approximately 136 acres of
19
    impact to Swainson's Hawk foraging habitat.
20
             On the other hand, a substantially decrease of
21
    approximately 11 acres out of the former 29 in nesting
22
```

Now, if you direct your attention to the lower

25 table there, where we are seeing an increased acreage

23

habitat.

1 of impacts on foraging habitat, you will see that there

- 2 is a very substantial reduction in impacts to moderate
- 3 quality forage habitat but a very large increase in
- 4 impacts to low and very low-quality foraging habitat.
- 5 That is, there has been a net shift in impacts from
- 6 moderate to very high-quality habitat.
- 7 Instead, we're impacting primarily low and
- 8 very low-quality habitat. This is why we interpret
- 9 this change as being beneficial for the Swainson's
- 10 Hawk.
- 11 MS. MESERVE: So you're -- But you're adding a
- 12 lot of low-value habitat?
- I found this table confusing.
- 14 Are you saying you're -- Wouldn't low-value
- 15 habitat be lower value for the bird and you're --
- 16 WITNESS EARLE: That's correct.
- 17 MS. MESERVE: -- adding a lot of that?
- 18 WITNESS EARLE: That's correct.
- 19 Impacts on low-value habitat, which have
- 20 little significance for the birds, have been greatly
- 21 increased.
- In compensation for that, the impacts to
- 23 moderate-value habitat have been greatly decreased.
- 24 This means greater forage availability for the Sandhill
- 25 Cranes (sic) compared to what was proposed in the Final

- 1 EIR/EIS.
- 2 MS. MESERVE: Swainson's Hawk, you meant to
- 3 say.
- 4 WITNESS EARLE: I'm sorry. Swainson's Hawk.
- 5 (Pause in proceedings.)
- 6 CO-HEARING OFFICER DODUC: And how do you
- 7 consider the plus 41 for the very high habitat?
- 8 WITNESS EARLE: That is an adverse impact.
- 9 MS. MESERVE: So you're losing --
- 10 WITNESS EARLE: But it is proportionally a
- 11 very small percent impact, approximately 5 percent.
- MS. MESERVE: There's very little habitat in
- 13 the valley for Swainson's Hawk under current
- 14 development conditions, though; isn't that true? Of
- 15 high value.
- 16 WITNESS BRADBURY: I -- I can answer that.
- 17 That's not true. Actually, there's quite a
- 18 lot of very high-value habitat in the Delta.
- 19 Swainson's Hawks primarily like to forage
- 20 alfalfa. Alfalfa is the most heavily used. And there
- 21 is quite a lot of alfalfa in the Delta and around the
- 22 areas where the Project will occur.
- 23 MS. MESERVE: Okay. I think I'm going to
- 24 leave the questions off with that.
- 25 Thank you for your indulgence.

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1 And I'll allow the next questioner up.
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- 2 CO-HEARING OFFICER DODUC: All right.
- 3 Mr. Jackson, you're up.
- 4 And, Candace, are you okay with going to about
- 5 2:30 and then we'll take a break then?
- THE REPORTER: Um-hmm.
- 7 CO-HEARING OFFICER DODUC: Okay. So
- 8 Mr. Jackson, I don't know if you heard, but I would
- 9 like to give the court reporter a break at 2:30 or
- 10 around there so --
- 11 MR. JACKSON: I did.
- 12 CO-HEARING OFFICER DODUC: So --
- MR. JACKSON: I did hear that and --
- 14 CO-HEARING OFFICER DODUC: -- if there's a
- 15 good time in your cross to . . .
- 16 (Pause in proceedings.)
- 17 MR. JACKSON: My questions are mostly for
- 18 Dr. Earle, and I assume Mr. Bradbury will get involved
- 19 when he -- when he thinks he's got something.
- 20 And then there will be some questions for
- 21 Mr. Grimaldo.
- 22 The questions for Dr. Earle are in regard to
- 23 the California Black Rail, noise effects on the Rail
- 24 and other terrestrial species, ag ditches and
- 25 conveyance channels as habitat, a number of specific

1 misstatements of my witnesses' testimony, at least they

- 2 look like it to me, so maybe they'll fix them.
- 3 And the -- the final topic would be the
- 4 commitment for surveys in mitigation that he recounts
- 5 through his testimony.
- 6 CROSS-EXAMINATION BY
- 7 MR. JACKSON: Good morning (sic), Dr. Earle.
- 8 My name is Mike Jackson. I'm representing the
- 9 California Sportfishing Protection Alliance, the
- 10 California Water Impact Network, and AquAlliance.
- 11 I would like to go to DWR-1219 at Page 8, and
- 12 the first questions will be about Lines 6 to 21.
- 13 (Exhibit displayed on screen.)
- 14 (Pause in proceedings.)
- MR. JACKSON: Dr. Earle, in this passage,
- 16 you . . . assert that Dr. Fries estimated that, with --
- 17 I think you pointed out -- with no survey data, that no
- 18 California Black Rails will be affected -- or that you
- 19 have asserted that no California Black Rails will be
- 20 affected by the tunnel construction; is that correct?
- 21 WITNESS EARLE: I agree with what it states on
- 22 Lines 8 and 9 here.
- 23 MR. JACKSON: All right.
- 24 And I think you indicate that, at Page --
- 25 at --

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1 Could we go to Exhibit SWRCB-102.
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- 2 (Exhibit displayed on screen.)
- 3 MR. JACKSON: Actually, I think it'll be more
- 4 direct and quicker if we go to SWRCB-111 at Pages 4-52
- 5 to 4-54.
- 6 (Exhibit displayed on screen.)
- 7 MR. JACKSON: Now, these are the Avoidance and
- 8 Mitigation (sic) Measures . . .
- 9 We need to go on to Page 4-52.
- 10 (Exhibit displayed on screen.)
- 11 MR. JACKSON: These are the Avoidance and
- 12 Minimization Measures for the California Black Rail; is
- 13 that correct?
- 14 WITNESS EARLE: That is correct.
- 15 MR. JACKSON: Did you rely on Exhibit -- on
- 16 this exhibit to form your opinion that -- that the
- 17 Project will result in no injury to Black Rails or
- 18 mortality of Black Rails because AMM 38 requires
- 19 avoidance of the California Black Rail individuals?
- 20 WITNESS EARLE: I did assume in my analysis
- 21 that the Avoidance and Minimization Measures prescribed
- 22 in AMM 38 would be followed and that that would
- 23 contribute to avoiding impacts to the California Black
- 24 Rail.
- 25 MR. JACKSON: All right. And in following

- 1 those, did you review the survey data for Black Rails
- 2 in order to determine whether or not it would be
- 3 possible for this AMM 38 to accomplish lack of
- 4 mortality or injury?
- 5 WITNESS EARLE: That is a question about
- 6 survey data.
- 7 The word "survey," as you can see, appears
- 8 quite a bit in AMM 38. This entirely describes surveys
- 9 that have not yet been performed and, therefore, have
- 10 not produced any data.
- 11 So, no, I did not rely on any data from these
- 12 surveys.
- I did rely on data that we have regarding the
- 14 known distribution of Black Rail, which is shown in the
- 15 Supplemental EIR/EIS in Chapter 12.
- MR. JACKSON: You were critiquing at this
- 17 point Dr. Fries for not having survey data to support
- 18 his opinion; correct?
- 19 WITNESS EARLE: I -- I'm -- You'll have to
- 20 define what you mean by "survey data."
- 21 You've been referring to surveys in the
- 22 context of AMM 38. Dr. Fries did not specify what he
- 23 meant when he talked about surveys.
- MR. JACKSON: Well -- So, let's go through a
- 25 couple of questions, then, to see if we can highlight

- 1 that.
- 2 Has DWR, or anyone at the California WaterFix,
- 3 done surveys for the California Black Rail in the
- 4 construction activity zones?
- 5 MR. MIZELL: I'm going to object to the line
- 6 of questioning as being beyond Dr. Earle's testimony.
- 7 Dr. Earle does quote Dr. Fries in the first
- 8 paragraph of this section of his testimony.
- 9 Dr. Fries asserted -- and this is simply
- 10 basing my objection on this, so I'm not testifying --
- 11 that the Final EIR/EIS simply estimates with no survey
- 12 data, et cetera. It's quoted in Dr. Earle's testimony.
- Dr. Earle goes on to explain how AMM 38
- 14 refutes that assertion. At no point does Dr. Earle
- 15 state in his testimony, so far as Mr. Jackson has cited
- 16 to, survey data.
- So, again, I'd say it's beyond the scope of
- 18 Dr. Earle's testimony at this point.
- 19 CO-HEARING OFFICER DODUC: Mr. Jackson, I'm
- 20 reading the testimony and I would tend to concur unless
- 21 you can convince me otherwise.
- MR. JACKSON: Well, I'll make a run at it.
- 23 The . . . California WaterFix has --
- 24 has . . . has not completed its surveys of California
- 25 Black Rail habitat at this time; has it -- have they?

- 1 MR. MIZELL: I'm going to --
- 2 CO-HEARING OFFICER DODUC: That is correct.
- 3 Mr. Jackson, my -- my understanding, as I'm
- 4 reading the testimony now, is that what Dr. Earle is
- 5 rebutting is, he is not arguing that surveys have been
- 6 conducted, but he is saying that surveys will be
- 7 conducted prior to construction, and that, along with
- 8 other measures, such as AMM 38, would provide the --
- 9 the protection as described in the Final EIR/EIS.
- 10 That's my understanding.
- 11 So he -- He did not contend that surveys had
- 12 been conducted. So that's not a point for argument
- 13 right now.
- 14 So I'm trying to understand what you are
- 15 trying to emphasize.
- MR. JACKSON: What I'm trying to emphasize
- 17 is -- and I was going to get to it toward the end,
- 18 but --
- 19 CO-HEARING OFFICER DODUC: Get to it now,
- 20 Mr. Jackson.
- 21 MR. JACKSON: I will get to it right now.
- How, without surveys, can -- can anyone
- 23 determine how much habitat there is that is presently
- 24 occupied, how many California Black Rails there are,
- 25 and whether or not avoidance is possible?

1 WITNESS EARLE: I'll probably have to ask you

- 2 to repeat that.
- 3 But the first of those questions was, how do
- 4 you determine how much occupied California Black Rail
- 5 habitat there is out there.
- 6 In response to that, it's irrelevant. We
- 7 don't really care whether it's occupied right now
- 8 because nobody's out there doing anything right now in
- 9 connection with the California WaterFix.
- 10 We care whether it's occupied when the impacts
- 11 are going to occur, which is why the surveys are
- 12 performed shortly -- during the year prior to when
- 13 construction occurs. That way, we will have an
- 14 estimate of whether the habitat is occupied.
- 15 As to whether the habitat exists, a model of
- 16 habitat which relies upon known survey data that's been
- 17 collected by various entities associated with the State
- 18 of California was used to develop a -- an estimate of
- 19 where California Black Rail habitat likely occurs
- 20 within the Delta.
- 21 This model was vetted, commented on and
- 22 revised in accordance with recommendations from the
- 23 California Department of Fish and Wildlife during the
- 24 process used in developing the BDCP. It was
- 25 subsequently revised again with the input from the CDFW

- 1 during the process of developing the Final EIR/EIS.
- 2 That tells us where the habitat is out there
- 3 and is the basis of acreage estimates of habitat that
- 4 would be affected.
- 5 Again, as to whether the habitat is occupied,
- 6 that will be determined shortly before California
- 7 WaterFix impacts occur with avoidance measures required
- 8 and as described here in AMM 38.
- 9 MR. JACKSON: Well, let's -- Could you Project
- 10 DWR-1309.
- 11 (Exhibit displayed on screen.)
- 12 MR. JACKSON: Okay. Are you familiar with
- 13 this document?
- 14 WITNESS EARLE: I have not read it in its
- 15 entirety. I've seen it before.
- MR. JACKSON: All right. Go to Page 2,
- 17 please.
- 18 (Exhibit displayed on screen.)
- 19 MR. JACKSON: Does this describe a Project
- 20 location on Bouldin Island in San Joaquin County,
- 21 California?
- 22 WITNESS EARLE: Yes, it does.
- 23 MR. JACKSON: And what kind of project is
- 24 that?
- 25 WITNESS EARLE: (Examining document.)

- 1 Bouldin Island is, I believe, where the -- the
- 2 primary launch point for the shaft construction and the
- 3 tunneling will be located.
- 4 There will also be RTM disposal sites located
- 5 there.
- 6 MR. JACKSON: And building of roads as well?
- 7 WITNESS EARLE: Yes.
- 8 MR. JACKSON: So it's building roads, a barge
- 9 landing, a launch pad, and disposal site; correct?
- 10 WITNESS EARLE: Those are among the activities
- 11 that would occur there. They're not necessarily a full
- 12 list.
- MR. JACKSON: Go to Page 3, please, and look
- 14 at Bullets B and C.
- 15 (Exhibit displayed on screen.)
- 16 CO-HEARING OFFICER DODUC: And you're going to
- 17 somehow link this back to Dr. Earle's rebuttal
- 18 testimony?
- 19 MR. JACKSON: Yes, I am.
- 20 CO-HEARING OFFICER DODUC: Please link it for
- 21 me now.
- MR. JACKSON: Do you see that the Project is
- 23 scheduled to begin December 12th, 2018, and end by
- 24 October 2019?
- 25 CO-HEARING OFFICER DODUC: And before you

- 1 answer that, Dr. Earle, again, Mr. Jackson, how --
- 2 explain to me, how is this linking back to this
- 3 rebuttal --
- 4 MR. JACKSON: I'm --
- 5 CO-HEARING OFFICER DODUC: -- testimony?
- 6 MR. JACKSON: I'm trying to link it back by
- 7 pointing out that there is a Project schedule to go on
- 8 Bouldin Island right about October of this year, and
- 9 that the surveys have not been done, and that it would
- 10 be -- therefore, the avoidance and mitigation is not
- 11 going to work.
- 12 MR. MIZELL: I would like to --
- 13 CO-HEARING OFFICER DODUC: All right.
- 14 MR. MIZELL: -- put this document in the
- 15 proper light: That it is a draft document as marked on
- 16 its face. And as I believe we have discussed quite
- 17 frequently here, the Permit from the State Water Board
- 18 must be granted prior to construction beginning.
- 19 So clearly a -- any estimation of construction
- 20 on this Project is contingent on some very large
- 21 caveats, one of them being the issuance of a Water
- 22 Rights Permit.
- 23 MR. JACKSON: Dr. Earle, have the surveys for
- 24 birds and other wildlife on Bouldin Island been done at
- 25 the present time, to your knowledge?

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1 MR. MIZELL: Objection: Asked and answered.
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- 2 CO-HEARING OFFICER DODUC: Sustained.
- No -- And let me understand, Dr. Earle.
- 4 My understanding of your testimony -- your
- 5 rebuttal testimony is that no studies have been done --
- 6 no surveys have been conducted but will be conducted.
- 7 And so that would apply to any potential construction
- 8 activities that Mr. Jackson might ask of you with
- 9 relation to the WaterFix.
- 10 WITNESS EARLE: I agree with all of that.
- 11 MR. JACKSON: Is Bouldin Island possible
- 12 roosting and foraging habitat for . . . for the . . .
- 13 Black Rail and -- and other species of concern?
- 14 CO-HEARING OFFICER DODUC: So, Mr. --
- 15 WITNESS EARLE: Mr. --
- 16 CO-HEARING OFFICER DODUC: Hold on. Hold on.
- 17 Hold on. Let's see.
- Mr. Jackson -- And this is -- This is not --
- 19 This is an ongoing thing. So I'm hoping that by
- 20 perhaps taking some time to discuss it, we get project
- 21 some clarity moving forward for all of us.
- I realize that your and some of the other
- 23 parties' contentions is that all the surveys should be
- 24 done, all the studies should be done, all the analysis
- 25 should be done before making assertions about impacts

- 1 or non-impacts or protectiveness going forward.
- 2 And I understand from Petitioners' witnesses
- 3 that they are relying on these future studies, future
- 4 analysis, and future commitments to ensure that
- 5 activities are protected going forward.
- 6 There is that disconnect that we've have
- 7 throughout this entire hearing. And your continuing
- 8 questioning of these witnesses along that line, while I
- 9 appreciate that it goes into the record so that -- upon
- 10 which you may make your closing arguments, is there a
- 11 way for us to shortcut to that given that this is a
- 12 long-standing . . . gap between where you would like to
- 13 see and where Petitioners have made their proposal?
- MR. JACKSON: I think that I'm using this as
- 15 an example because it is a commitment that is made in
- 16 the -- in the EIR.
- 17 CO-HEARING OFFICER DODUC: Um-hmm. There are
- 18 many commitments.
- 19 MR. JACKSON: And there are many commitments.
- 20 And this is the -- the first one of these
- 21 survey bird location --
- 22 CO-HEARING OFFICER DODUC: And when you say
- 23 "this," you are referring specifically to this
- 24 Bouldin --
- 25 MR. JACKSON: This Bouldin Tract --

- 1 CO-HEARING OFFICER DODUC: Okay.
- 2 MR. JACKSON: -- approach.
- 3 The . . . If I could put up SRB -- S --
- 4 CO-HEARING OFFICER DODUC: I'm sorry. Before
- 5 you pull up another document, help me understand.
- 6 Yes, I appreciate that this draft timeline,
- 7 this draft document, has a date here of December 12,
- 8 2018, but I need, I guess, a demonstration of proof for
- 9 you -- from you if you're going to continue to make the
- 10 argument using this particular example, that this
- 11 particular date is still valid.
- MR. JACKSON: Well, we -- We started by the
- 13 critique of my witness' testimony in regard to Black
- 14 Rail, and that his -- his allegations were without
- 15 survey.
- And I guess what I'm trying to point out is,
- 17 if surveys have not been done for potentially hundreds
- 18 of Black Rail, the -- and construction dates at least
- 19 in our -- in our record are beginning shortly, within
- 20 six weeks --
- 21 CO-HEARING OFFICER DODUC: That's not true,
- 22 Mr. Jackson.
- MR. JACKSON: Well, it --
- 24 CO-HEARING OFFICER DODUC: It's a draft
- 25 document.

1 MR. JACKSON: I understand. Is there a final

- 2 document?
- 3 CO-HEARING OFFICER DODUC: Miss Morris, and
- 4 then -- I'm sorry, Miss Morris, hold on.
- 5 Miss Des Jardins had been standing there before you.
- 6 MS. MORRIS: Oh, I'm sorry.
- 7 MS. DES JARDINS: I just wanted to point out
- 8 that DWR-1309 is DWR's exhibit. It is a draft
- 9 document, but it was submitted for the record.
- 10 To the extent that it is and it states that
- 11 construction is expected to begin in December 2018,
- 12 there's a question of whether the surveys could even be
- 13 completed, and certainly there are seasonal issues
- 14 about birds use and --
- 15 CO-HEARING OFFICER DODUC: Dr. Earle, to your
- 16 knowledge, is there a survey being planned for this
- 17 activity on Bouldin Island? And, if so, will it be
- 18 finished by December 12th?
- 19 WITNESS EARLE: Short answer: No.
- 20 Slightly longer answer: The Black Rail is a
- 21 migratory species. Work that commences during the
- 22 wintertime would not affect the Black Rail because
- 23 they're not present there.
- 24 Under those circumstances -- Actually, I
- 25 suspect that -- that surveys would not be required.

- 1 Also, surveys are required in potential
- 2 habitat for the California Black Rail. I'm not aware
- 3 offhand of where there is potential habitat for the
- 4 California Black Rail in close proximity to the
- 5 proposed construction. Surveys would only be required
- 6 if it were.
- 7 So, these specific questions about what is
- 8 going to happen on Bouldin Island and when, and what
- 9 will it do to Black Rails, require considerable more
- 10 analysis than we can produce off the cuff at this
- 11 moment.
- 12 CO-HEARING OFFICER DODUC: And, Mr. Jackson, I
- 13 go back to Dr. Earle's testimony, which is actually
- 14 quite short. He puts up one statement about Dr. Fries'
- 15 assertion that the Final EIR/EIS did not contain survey
- 16 data and to which his response was that survey will be
- 17 conducted and other Mitigation Measures will be taken.
- 18 MR. JACKSON: Before construction.
- 19 CO-HEARING OFFICER DODUC: Survey before
- 20 construction, yes.
- 21 And so that's the extent of it. And so I am
- 22 wondering how you are expanding that short piece of
- 23 testimony into this broader document that is not even
- 24 mentioned in his testimony.
- 25 MR. JACKSON: I do not want to sound

1 argumentative or flippant, but before lunch, we were

- 2 watching one or two references by witnesses that
- 3 expanded into bibliographies of 15 to 20 different
- 4 documents, and -- and I'm trying to get the rules
- 5 straight here.
- 6 CO-HEARING OFFICER DODUC: What are you -- I'm
- 7 not -- You totally confused me.
- 8 MR. JACKSON: Your -- Your statement that I'm
- 9 expanding the fact that there are no surveys, which
- 10 were commented on by this witness as a critique of my
- 11 witness' testimony --
- 12 CO-HEARING OFFICER DODUC: Okay.
- 13 MR. JACKSON: -- I'm trying to determine
- 14 whether or not, using the Black Rail as an example --
- 15 because there are a very large number of other species
- 16 to follow and I don't want to go into the same depth on
- 17 those -- if we can -- if we can get resolved about
- 18 whether or not there is going to be any construction
- 19 before we determine where these critters are.
- 20 CO-HEARING OFFICER DODUC: Please answer that
- 21 question.
- 22 WITNESS EARLE: No, there would not.
- 23 CO-HEARING OFFICER DODUC: Thank you.
- MR. JACKSON: Then taking out the question of
- 25 presence, what are the other . . . other protections,

- 1 other than this AMM, that allow you to conclude that
- 2 the impact on the Black Rail is going to be less than
- 3 significant?
- 4 WITNESS EARLE: The Black Rail would also
- 5 receive what you might call collateral benefits from
- 6 other aspects of the Project.
- 7 For instance, AMM 20 for Greater Sandhill
- 8 Crane goes into considerable detail about measures that
- 9 would minimize the risk of a bird striking a power
- 10 line.
- 11 Now, Black Rails are already at extremely low
- 12 risk of that because they -- they generally fly only
- 13 short distances and stay near the ground, but they can
- 14 reach the elevations of power lines during periodic
- 15 migrations or long-distance movements by the birds. In
- 16 those situations, they would be beneficiaries of the
- 17 same protections that are provided primarily for the
- 18 benefit of Greater Sandhill Crane.
- 19 Black Rails also use tidal habitat which is in
- 20 many ways similar to the tidal habitat that's being
- 21 proposed as mitigation for the Smelts.
- Now, not all Smelt habitat is suitable as
- 23 Black Rail habitat, but certainly a significant
- 24 fraction of it is.
- 25 And when we're talking about 1500 acres or so

- 1 of habitat mitigation for the fish, it is very likely
- 2 that significant acreage within that area will be
- 3 suitable for the Black Rail.
- 4 And, similarly, the Black Rail is also
- 5 beneficiary indirectly of a variety of other avoidance
- 6 and minimization measures and mitigation commitments
- 7 that are primarily intended to benefit other species.
- 8 MR. JACKSON: In regard to Smelt habitat --
- 9 CO-HEARING OFFICER DODUC: If you are moving
- 10 to a different --
- 11 MR. JACKSON: No. I'm staying -- He used the
- 12 Smelt as an example of in -- incidental benefit that
- 13 might protect the Black Rail.
- 14 CO-HEARING OFFICER DODUC: Okay. I'm trying
- 15 to give the court reporter her break.
- MR. JACKSON: Okay.
- 17 CO-HEARING OFFICER DODUC: So if you -- Is
- 18 this a short question?
- 19 MR. JACKSON: It'll be relatively short.
- 20 CO-HEARING OFFICER DODUC: Okay. Let's finish
- 21 this up, then.
- 22 (Pause in proceedings.)
- MR. JACKSON: What sort of foraging and
- 24 nesting habitat does the Black Rail use in the Delta?
- 25 WITNESS EARLE: Black Rail habitat is

1 primarily seasonally or perennially shallowly inundated

- 2 marshes.
- 3 MR. JACKSON: Calling your . . .
- 4 Do -- Do you -- Before I call it up.
- 5 Do you remember that the . . . that, at this
- 6 point, the environmental documents reflect that CFW
- 7 project impacts on the acreage of Black Rail habitat
- 8 would decrease from 13 acres in the Approved Project to
- 9 six areas in the new Proposed Project?
- 10 WITNESS EARLE: I believe that's the reduction
- 11 that's described in the Supplemental EIR/EIS.
- MR. JACKSON: Would you put up DDJ-246,
- 13 Page 12.
- 14 (Exhibit displayed on screen.)
- MR. JACKSON: Do you recognize this map?
- 16 WITNESS EARLE: I do not.
- 17 MR. JACKSON: Mr. Bradbury, do you recognize
- 18 this map?
- 19 WITNESS BRADBURY: Yes. It's part of my
- 20 paper.
- 21 CO-HEARING OFFICER DODUC: Microphone, please.
- 22 WITNESS BRADBURY: Yes, it's a figure in my
- 23 paper.
- MR. JACKSON: And the areas that appear as
- 25 black spots, what do they designate?

- 1 WITNESS BRADBURY: That is the predicted
- 2 probability of presence of Black Rails in the -- and
- 3 the area that was analyzed.
- 4 MR. JACKSON: Do which of the Black Rails --
- 5 Or do any of the areas that appear as black spots
- 6 coincide with California WaterFix construction
- 7 activities?
- 8 MR. MIZELL: Object to the line of
- 9 questioning. We've moved beyond the scope of the
- 10 rebuttal testimony provided by Dr. Earle and
- 11 Mr. Bradbury.
- 12 We're now exploring a tangent of a response --
- 13 a verbal response that Dr. Earle provided when asked to
- 14 elaborate on other portions of his testimony.
- I don't believe there's any tie-back to the
- 16 written testimony at this point on the extent of Black
- 17 Rail habitat and its overlap with the footprint.
- 18 CO-HEARING OFFICER DODUC: Mr. Jackson.
- 19 MR. JACKSON: Yes. The -- If -- If we could
- 20 go to . . . SWRCB-108 at Page 108.
- 21 CO-HEARING OFFICER DODUC: And while that is
- 22 being pulled up, what is the document and . . .
- MR. JACKSON: This is a document that is
- 24 the --
- 25 CO-HEARING OFFICER DODUC: And, more

1 importantly, how does it respond to Mr. Mizell's

- 2 objection?
- 3 MR. JACKSON: It responds to Mr. Mizell's
- 4 objection --
- 5 (Exhibit displayed on screen.)
- 6 MR. JACKSON: -- in that it points out that
- 7 there is a potential increase in Delta Smelt habitat --
- 8 which is what we were talking about -- that could be
- 9 used of -- be used for foraging or nesting habitat.
- 10 And I want to . . . I -- I want to establish
- 11 that, so that I can then go back to the rebuttal of
- 12 Dr. Earle and ask him how he can say with certainty at
- 13 the present time that this commits the Project to
- 14 reducing impacts below a level of significance,
- 15 which -- through habitat restoration, which he says
- 16 will be performed prior to the habitat loss.
- 17 CO-HEARING OFFICER DODUC: Are you able to
- 18 answer that question, Dr. Earle?
- 19 Or do we need to walk through those various
- 20 documents?
- 21 WITNESS EARLE: Would you please restate the
- 22 question.
- MR. JACKSON: Yes.
- I'd like to see the last paragraph on this
- 25 particular page.

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1 (Exhibit displayed on screen.)
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- 2 MR. JACKSON: This is from the California
- 3 WaterFix Final Environmental Impact Report, and it's
- 4 the last paragraph.
- 5 Are you familiar with that?
- 6 WITNESS EARLE: I've seen it before.
- 7 MR. JACKSON: It says here (reading):
- 8 "With regard to California Black
- 9 Rail" that "the proportions (sic) of the
- increase in dealt Smelt habitat . . . of
- 11 (sic) (up to 1,022 acres) . . . "
- 12 Are those acres included in the six that
- 13 Mr. Bradbury estimates in table -- in his tables?
- 14 CO-HEARING OFFICER DODUC: I'm sorry. Are we
- 15 getting sidetracked again? I thought you were
- 16 repeating the -- the direct question that you wanted
- 17 Dr. Earle to answer.
- 18 MR. JACKSON: I --
- 19 CO-HEARING OFFICER DODUC: The culmination of
- 20 all this is . . .
- MR. JACKSON: Right.
- 22 Dr. Earle indicates that he -- that, without
- 23 the surveys --
- 24 CO-HEARING OFFICER DODUC: Um-hmm.
- 25 MR. JACKSON: -- and avoidance, that

1 potentially Delta Smelt habitat in this statement could

- 2 serve as additional nesting and foraging habitat for
- 3 the Rail.
- 4 CO-HEARING OFFICER DODUC: Okay.
- 5 MR. JACKSON: And I'm trying to find out
- 6 whether or not this 1,022 acres is included in the six
- 7 that was identified in the previous paper.
- 8 Or if --
- 9 CO-HEARING OFFICER DODUC: And for what
- 10 purpose?
- 11 MR. JACKSON: To indicate that -- that they
- 12 have completely underestimated the amount of Black Rail
- 13 acreage that will be impacted by the CWF.
- 14 WITNESS EARLE: Very well.
- 15 CO-HEARING OFFICER DODUC: Thank you.
- 16 WITNESS EARLE: I think that this paragraph
- 17 beautifully summarizes the situation.
- 18 As we have discussed many times before, sites
- 19 for habitat restoration under the California WaterFix
- 20 have not yet been designated and would be identified
- 21 subject to Project approval. The . . .
- This is a strategy that has been agreed to by
- 23 the participating agencies and -- and, as stated here,
- 24 if there would be impacts to this fully protected
- 25 species as a result of selection of given mitigation

- 1 site, DWR would comply with the law.
- In other words, either a site would be
- 3 modified or work would be performed at such a time that
- 4 take of the fully protected species could be fully
- 5 avoided, or possibly a site might be disqualified if it
- 6 was not possible to avoid take of this particular
- 7 species.
- 8 If impacts that did not amount to take on the
- 9 Black Rail would nonetheless occur, then they would be
- 10 evaluated through Supplemental CEQA evaluation.
- 11 Regardless, approval of the California
- 12 WaterFix does not constitute approval of mitigation
- 13 sites. It's been clearly stated throughout this
- 14 process that those approvals have to be secured
- 15 separately.
- MR. JACKSON: So the -- the questions
- 17 are directed toward the -- the difference in these
- 18 6 acres and what the likely distribution of Black Rails
- 19 is from Mr. Bradbury's paper and from surveys that
- 20 haven't -- that they admit need to happen but haven't
- 21 happened yet.
- 22 And we're getting, again, close to the end of
- 23 this hearing, and I still don't know how they're going
- 24 to protect Black Rails, and that's what the questions
- 25 are about.

1 CO-HEARING OFFICER DODUC: Yes. And you've

- 2 established that on multiple fronts, that they are
- 3 still seeking to base future protective measures on
- 4 future studies and future plans.
- 5 MR. JACKSON: Okay. I have a few questions
- 6 for Mr. Bradbury.
- 7 CO-HEARING OFFICER DODUC: And we are going to
- 8 ask you to wait so that the court reporter can get a
- 9 break, so that we can all get a break, and we will
- 10 return at 3 o'clock.
- 11 (Recess taken at 2:46 p.m.)
- 12 (Proceedings resumed at 3:00 p.m.:)
- 13 CO-HEARING OFFICER DODUC: All right. It is
- 14 3 o'clock. We're back.
- 15 Miss Nikkel.
- 16 MS. NIKKEL: Good afternoon. Meredith Nikkel
- 17 on behalf of North Delta Water Agency.
- 18 If the Hearing Officers will allow me, I just
- 19 have an update on scheduling. And I was mistaken
- 20 through a variety of miscommunications.
- 21 There's no need for a switch for North Delta
- 22 Water Agency. North Delta Water Agency will be
- 23 available to testify immediately after Grasslands Water
- 24 District this week.
- 25 And also on behalf of Group 7, the Sacramento

- 1 Valley Water Users, I can confirm that Mr. Bourez and
- 2 Dr. Shankar Parvathinathan are available to testify
- 3 tomorrow at 9:30.
- 4 CO-HEARING OFFICER DODUC: Okay. How do we
- 5 say that last name again?
- 6 MS. NIKKEL: Parvathinathan.
- 7 CO-HEARING OFFICER DODUC: Parvathinathan.
- 8 MS. NIKKEL: But it's not well rehearsed with
- 9 the witness himself. It will be perfect tomorrow
- 10 morning.
- 11 CO-HEARING OFFICER DODUC: All right. Thank
- 12 you, Miss Nikkel.
- MS. NIKKEL: Thank you.
- 14 MR. MIZELL: Hearing Officer Doduc, if I might
- 15 get additional clarity from Miss Nikkel.
- Does that include the appearance of Mr. Gary
- 17 Kienlen?
- 18 MS. NIKKEL: It does. That's where the
- 19 miscommunication started, but there's no -- no
- 20 unavailability of Mr. Kienlen. He's available to
- 21 testify together with the North Delta witnesses.
- Thank you.
- 23 CO-HEARING OFFICER DODUC: All right.
- MR. O'HANLON: Daniel O'Hanlon on behalf of
- 25 Westlands Water District. I'm here to give an apology.

- 1 At the last break, Hearing Officer Doduc noted
- 2 that Westlands had violated an order of the Board. I
- 3 was surprised by that.
- 4 I confirmed that, in fact, your June 18 order
- 5 does say to obtain permission prior to filing written
- 6 objections to testimony, which we did not do, and that
- 7 was my oversight, and I apologize for that.
- 8 My intention will be to move to strike that
- 9 testimony orally at the appropriate time unless the
- 10 Board orders otherwise.
- 11 CO-HEARING OFFICER DODUC: All right. We'll
- 12 get to that when we get to it.
- MR. O'HANLON: Thank you.
- 14 CO-HEARING OFFICER DODUC: All right. At this
- 15 time, we will turn back to Mr. Jackson.
- MR. JACKSON: Thank you.
- 17 Actually, I have a couple more questions for
- 18 Dr. Earle.
- 19 Dr. Earle, you answered questions in regard to
- 20 the testimony of Dr. Shilling in response to
- 21 Ms. Meserve.
- Do you remember that earlier . . . testimony?
- 23 WITNESS EARLE: Would you refresh me as to the
- 24 issue that was being discussed?
- MR. JACKSON: Sure.

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1 Could you put up DWR-1219, Page 4 at Lines 4
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- 2 and 5, and then 22 and 24 is pretty much the same
- 3 thing.
- 4 (Pause in proceedings.)
- 5 CO-HEARING OFFICER DODUC: So that would be
- 6 noise.
- 7 (Exhibit displayed on screen.)
- 8 MR. JACKSON: Page 4.
- 9 (Exhibit displayed on screen.)
- 10 MR. JACKSON: Actually, it starts at Line 6
- 11 (reading):
- 12 "Dr. Shilling cited no independent
- 13 analysis of the . . . CWF in his direct
- 14 testimony . . . and (sic) that he had
- 15 (sic) performed no quantitative
- analysis . . . "
- 17 Have you done any quantitative analysis in
- 18 regard to your work that you were te -- that you
- 19 testified to in this particular document?
- 20 WITNESS EARLE: Yes. Yes. This document
- 21 refers to the analysis that determined the distance at
- 22 which noise affects the Project would diminish to a
- 23 background threshold of 50 dBA.
- 24 MR. JACKSON: Calling up Exhibit SR --
- 25 SWRCB-11.

- 1 (Exhibit displayed on screen.)
- 2 MR. JACKSON: And we've been here before in
- 3 regard to the Crane; correctly (sic)? This is where
- 4 the Minimization Measure 38 is.
- 5 And there are other species that have
- 6 mitigation plans as well in -- in this document; are
- 7 there not?
- 8 WITNESS EARLE: Avoidance and minimization
- 9 measures are specified for a number of species.
- 10 MR. JACKSON: Okay. Did you do any
- 11 quantitative analysis of the impacts regarding noise
- 12 and traffic on Swainson's Hawk?
- MR. BERLINER: Objection: I believe this goes
- 14 beyond the scope of his rebuttal testimony.
- 15 CO-HEARING OFFICER DODUC: Mr. Jackson.
- MR. JACKSON: He's criticizing others for not
- 17 doing quantitative analysis. I just want to see
- 18 whether or not, on the -- I was going to go through
- 19 them quickly -- on the -- a number of the species that
- 20 are on the fully protected list.
- 21 CO-HEARING OFFICER DODUC: And Mr. Berliner?
- 22 MR. BERLINER: The witness was not testifying
- 23 about quantitative studies that he did. He was
- 24 rebutting work done by others on behalf of Protestants
- 25 in his testimony.

1 So the work that he has done is not at issue

- 2 in his rebuttal testimony.
- 3 CO-HEARING OFFICER DODUC: Mr. Jackson, if
- 4 you're going to --
- 5 MR. JACKSON: Just "yes" --
- 6 CO-HEARING OFFICER DODUC: -- quickly lay --
- 7 MR. JACKSON: They're just "yes" or "no"
- 8 answers.
- 9 CO-HEARING OFFICER DODUC: I'm -- I'm --
- 10 I'm -- I need -- I'm assuming here that you are going
- 11 to quickly lay the foundation for arguments that you'll
- 12 be making in your closing briefs?
- MR. JACKSON: Yes.
- 14 CO-HEARING OFFICER DODUC: All right.
- 15 Quickly, then, Mr. Jackson.
- MR. JACKSON: Yes.
- 17 Did you do any quantitative analysis in regard
- 18 to Swainson's Hawks?
- 19 WITNESS EARLE: To avoid going through this
- 20 with regard to every species of bird named in the
- 21 EIR/EIS, I would like to simply state that we did an
- 22 analysis of the distance at which the noise sources
- 23 would diminish to a background level of approximately
- 24 50 dBA. That distance is the same regardless of the
- 25 species of bird affected.

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1 MR. JACKSON: In regard to the -- to
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- 2 Page 4-54 --
- 3 (Exhibit displayed on screen.)
- 4 MR. JACKSON: -- Lines 4 to 9, it talks about
- 5 a -- a construction footprint within 500 feet of a
- 6 known calling center.
- 7 Are you familiar with that?
- 8 WITNESS EARLE: That is what it says.
- 9 MR. JACKSON: What evidence did you cite that
- 10 Rails can acclima -- acclimatize to the noise within
- 11 that distance?
- MR. BERLINER: Again, the same objection:
- 13 This is now examining beyond the scope of the
- 14 witness' rebuttal testimony.
- And I understand it might be brief, but it's
- 16 off topic, outside the scope.
- 17 CO-HEARING OFFICER DODUC: So point me,
- 18 Mr. Jackson, to where in Dr. Earle's testimony this
- 19 line of questioning is addressing.
- MR. JACKSON: Yes. He relies on the
- 21 FEIR/FE -- FEIS in regard to his testimony at Lines 22
- 22 and 24 --
- 23 CO-HEARING OFFICER DODUC: Of page?
- MR. JACKSON: -- talking about the . . .
- 25 Exhibit SWRCB-111 for a number of other species going

- 1 down through 22 to 28.
- 2 I'm just trying to determine, since his
- 3 criticism of Dr. Shilling was that he performed no
- 4 quantitative analysis, whether or not Dr. Earle did any
- 5 quantitative analysis for the list of species that he
- 6 has in his testimony at Page 4.
- 7 CO-HEARING OFFICER DODUC: So, Dr. Earle
- 8 listed his testimony all the analysis evaluated in the
- 9 FEIR/FEIS to rebut what he believed is Dr. Shilling's
- 10 lack of studies.
- 11 Is that correct, Dr. Earle?
- 12 WITNESS EARLE: Yes, I believe so.
- 13 CO-HEARING OFFICER DODUC: So I guess my --
- 14 What I'm interpreting Mr~Berliner's objection to be is,
- 15 Dr. Earle lists the studies in the FEIR/IS that were
- 16 conducted by Petitioners to contrast against
- 17 Dr. Shilling's what he characterized is lack of
- 18 independent analysis.
- 19 And you are now using that to delve into the
- 20 specific of each of these studies in the FEIR/FEIS.
- 21 MR. JACKSON: No, I'm --
- 22 CO-HEARING OFFICER DODUC: Is that your
- 23 objection, Mr. Berliner?
- MR. BERLINER: In -- In essence, yes.
- 25 CO-HEARING OFFICER DODUC: And, Mr. Jackson,

- 1 if that's not what you're doing, then please explain.
- 2 MR. JACKSON: What I'm doing is trying to
- 3 determine whether or not, with this list that's in his
- 4 testimony, he did -- personally did any quantitative
- 5 analysis.
- 6 CO-HEARING OFFICER DODUC: May we just ask
- 7 that.
- 8 Dr. Earle, as reflected in your testimony on
- 9 Page 4, et al., in response to Dr. Shilling, did you
- 10 yourself conduct any of those analysis or evaluations?
- 11 WITNESS EARLE: I . . . am not exactly clear
- 12 which analysis I'm being asked on.
- 13 CO-HEARING OFFICER DODUC: All the ones
- 14 starting on Line 12, I guess.
- 15 WITNESS EARLE: 12. So (reading):
- ". . . Effects of increased traffic on
- 17 local roads . . . that could increase
- 18 wildlife mortality and impede wildlife
- 19 movement."
- 20 CO-HEARING OFFICER DODUC: You know what? It
- 21 just occurred to me, Mr. Jackson, that at least I read
- 22 Dr. Earle's testimony as saying these are the studies
- 23 that have been conducted. He's not claiming that he
- 24 conducted them himself.
- 25 MR. JACKSON: No. And there was testimony

- 1 from Dr. Shilling that dealt with the FEIR. But the
- 2 testimony, as I read it, from this witness is that
- 3 Dr. Shilling did no quantitative analysis, and he
- 4 admitted that on cross-examination.
- 5 I'm just trying to do the same thing with him
- 6 because -- I mean, if he did quantitative analysis, I
- 7 need to know about it. But if he didn't, it goes to
- 8 the weight of his critique of Dr. Shilling if he did
- 9 the same thing that Dr. Shilling did and just debated
- 10 what was in the FEIR.
- 11 CO-HEARING OFFICER DODUC: All right.
- 12 Dr. Earle.
- 13 WITNESS EARLE: Well, with regard to that
- 14 point, I would just note that the basis for the opinion
- 15 that I -- that I expressed is based in large part upon
- 16 review and approval of the FEIR/S by fish and wildlife
- 17 agencies, not just by one Consultant Biologist.
- Dr. Shilling, on the other hand, essentially
- 19 presents his statements as being statements of opinion
- 20 and supported by evidence.
- 21 Now . . .
- 22 Well, I think -- I think that addresses the --
- 23 the concern.
- MR. JACKSON: When you were considering the
- 25 adequacy of these . . . avoidance methodologies in

- 1 regard to noise, did you evaluate the noise created
- 2 by -- by the barges and tugboats going by for Black
- 3 Rail?
- 4 WITNESS EARLE: Barge and tugboat noise was
- 5 considered in the analysis of effects on wildlife,
- 6 which I repeat was based on consideration the magnitude
- 7 of the noise produced, and was regarded to be roughly
- 8 equivalent for all birds that might be potentially
- 9 exposed to it, among them Black Rail.
- 10 MR. JACKSON: Are you -- Are you aware that
- 11 tugboats create an average noise level of 85 decibels?
- MR. BERLINER: Objection: Assumes facts not
- 13 in evidence.
- 14 CO-HEARING OFFICER DODUC: Mr. Jackson.
- MR. JACKSON: What is the -- What is your
- 16 knowledge of the noise level of a tugboat moving . . .
- 17 moving adjacent to Rail habitat?
- 18 WITNESS EARLE: I have not specifically
- 19 researched that question.
- 20 I'm reasonably certain that I could find
- 21 information on the noise produced by a tugboat. Of
- 22 course, tugboats vary in size from 20 feet to 250 feet
- 23 long, so I would need a few more specifics on that, but
- 24 I'm sure the data are out there.
- 25 MR. JACKSON: And -- But you're not familiar

- 1 with what they are.
- 2 WITNESS EARLE: No, I do not offhand recall
- 3 the noise produced by the majority of pieces of
- 4 construction equipment that might be used in the course
- 5 of constructing the California WaterFix.
- 6 MR. JACKSON: Has the California WaterFix
- 7 determined that there are no California Black Rails
- 8 within 500 feet of the barge landings?
- 9 MR. BERLINER: Objection: This has been asked
- 10 and answered, and it's beyond the scope of his
- 11 testimony.
- 12 CO-HEARING OFFICER DODUC: Sustained.
- 13 MR. JACKSON: Relative to the avoidance and
- 14 mitigation strategy, there is indication that the
- 15 California WaterFix would construct a sound barrier
- 16 between nest sites and a tugboat, or any noise source.
- 17 MR. BERLINER: Objection: This is beyond the
- 18 scope of his testimony. We're now into specific
- 19 Mitigation Measures.
- 20 MR. JACKSON: Which . . . Which he quotes in
- 21 his testimony.
- 22 CO-HEARING OFFICER DODUC: And, again, I'll go
- 23 back to:
- Dr. Earle, I believe, listed all these various
- 25 impacts, analysis, studies, options simply to

- 1 demonstrate that there are some analysis.
- 2 I don't think -- And I'm not intending for you
- 3 to go into the detail of all these various studies that
- 4 he cites.
- 5 MR. JACKSON: The question that was asked was:
- 6 How would someone construct a sound barrier
- 7 between a nest and a tugboat passing within 500 feet?
- 8 You're on the waterside of the levee.
- 9 CO-HEARING OFFICER DODUC: And point me to
- 10 where in his testimony makes mention of that.
- 11 (Pause in proceedings.)
- MR. JACKSON: It's AMM 38, Page 54, Line 4 to
- 13 9 in SWRCB-111.
- 14 (Scrolling through document.)
- MR. BERLINER: As we're scrolling, my
- 16 objection is going to be the same, which is: This is
- 17 all premised as a response to the point that
- 18 Dr. Shilling cited no independent analysis in his
- 19 testimony, which is on Line 6 of Page 4.
- 20 And -- And Mr. Earle goes through, and this is
- 21 just a continuation of his response to that contention.
- 22 So he's not opening up to say, "Let's discuss
- 23 all these Mitigation Measures." I think he explained
- 24 before why he was doing this, so I won't repeat it.
- 25 CO-HEARING OFFICER DODUC: Sustained.

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1 MR. JACKSON: Go to SR -- SWRCB-113,
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- 2 Chapter 12. And I'm looking for Table 12-54.
- 3 (Exhibit displayed on screen.)
- 4 MR. JACKSON: These questions are about
- 5 agricultural ditches and conveyance channels.
- 6 As -- As -- Do you see on this table that the
- 7 Proposed Project estimates fill of 80.14 acres of
- 8 agricultural ditches and 19.42 acres of conveyance
- 9 channel?
- 10 And this is actually an increase from the --
- 11 from the Approved Project.
- 12 Now go to Page 12-83, Lines 11 to 13.
- 13 (Exhibit displayed on screen.)
- MR. JACKSON: And, yes, that was the
- 15 highlighted part of this.
- 16 (Exhibit displayed on screen.)
- MR. JACKSON: And to the end of the sentence.
- 18 (Exhibit displayed on screen.)
- MR. JACKSON: Dr. Earle, is it your opinion
- 20 that ag ditches and conveyance channels are not
- 21 important for the existence of birds and other
- 22 wildlife?
- 23 WITNESS EARLE: It is not.
- 24 MR. JACKSON: It is not?
- 25 WITNESS EARLE: No.

1 A variety of wildlife species make regular use

- 2 of those habitats, and particularly the Giant Garter
- 3 Snake makes extensive use of them, as is noted in our
- 4 analysis of effects on that species.
- 5 MR. JACKSON: And that would be true for
- 6 Modesto Song Sparrows?
- 7 WITNESS EARLE: With regard to Modesto Song
- 8 Sparrows, I have not reviewed the habitat model for
- 9 that species for years now. And I would have to go
- 10 back and look at the cover types that we included in
- 11 that habitat model.
- MR. JACKSON: Would your answer be the same
- 13 for Common Yellow Throat?
- 14 WITNESS EARLE: Yes.
- MR. JACKSON: For Marsh Wrens?
- 16 WITNESS EARLE: Yes.
- 17 MR. JACKSON: For Red-Winged Blackbirds?
- 18 WITNESS EARLE: For any species you convey in
- 19 those analyzed in the EIR/EIS, we developed, in
- 20 collaboration with U.S. Fish and Wildlife Service and
- 21 CDFW, a habitat model describing its potential
- 22 occurrence within the vicinity of the Project.
- 23 Those habitat models specify the cover types
- 24 and the habitat types where those species are expected
- 25 to potentially occur.

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1 MR. JACKSON: So, in -- in your professional
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- 2 opinion, the statement in this document is incorrect.
- 3 MR. MIZELL: Objection as to vague and
- 4 ambiguous.
- 5 What statement are we talking about? What
- 6 document are we talking about.
- 7 MR. JACKSON: (Reading):
- 8 "Generally, agricultural ditches and
- 9 conveyance channels, which are regularly
- 10 ill-maintained and often devoid of
- vegetation, support only minimal
- 12 hydrologic (sic) function (water
- conveyance), with virtually no water
- 14 quality or habitat function."
- 15 WITNESS EARLE: I would say --
- 16 MR. BERLINER: Objection. I'm sorry.
- 17 Objection.
- I believe inadvertently Mr. Jackson may have
- 19 misread the sentence, which, if I understood correctly,
- 20 he stated "which are regularly ill-maintained" and
- 21 that's what the court reporter has in the transcript,
- 22 and I believe the sentence reads, "Which are regularly
- 23 maintained."
- MR. JACKSON: Yeah, I did misspeak.
- 25 CO-HEARING OFFICER DODUC: All right. So

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1 correct it.
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- 2 MR. JACKSON: So the correct statement is
- 3 (reading):
- 4 "Generally agricultural ditches and
- 5 conveyance channels, which are regularly
- 6 maintained and often devoid of
- 7 vegetation, support only minimal
- 8 hydrologic -- hydraulic function (water
- 9 conveyance), with virtually no water
- 10 quality or habitat function."
- 11 Is that statement, in your professional
- 12 opinion, incorrect?
- 13 WITNESS WE: Well, I would begin by noting a
- 14 grammatical error.
- 15 If we read this as saying "agricultural
- 16 ditches and conveyance channels, 'that' are regularly
- 17 maintained and often devoid of vegetation, support only
- 18 minimal hydraulic function, "then, to a large degree,
- 19 that is probably true in the Delta.
- 20 However, many ditches do not receive that
- 21 level of maintenance and have become colonized by a
- 22 variety of vegetation types and -- and in those cases
- 23 it's possible that they support greater function.
- 24 Also, qualitative statements like "virtually
- 25 no" are somewhat questionable. Certainly, there is a

1 spectrum of variability with regard to those ecological

- 2 functions listed in that sentence.
- 3 MR. JACKSON: Insofar as these -- as the --
- 4 oops, excuse me -- as the agriculture ditches and
- 5 conveyance channels in the Delta are . . . left in some
- 6 condition other than sort of scraped, they do play a
- 7 role in habitat for the species that we talked about.
- 8 WITNESS EARLE: As -- As I noted earlier,
- 9 there are species treated in the analysis for which
- 10 these are regarded as potentially suitable habitat and
- 11 are included as such in calculations of impact to
- 12 acreage.
- MR. JACKSON: Thank you.
- 14 (Pause in proceedings.)
- MR. JACKSON: I'd like to go to DG -- DDJ-246.
- 16 This is the last line of discussion.
- 17 (Exhibit displayed on screen.)
- 18 MR. JACKSON: And these are questions for
- 19 Mr. Bradbury.
- 20 And I'd like to go to Page 2.
- 21 (Exhibit displayed on screen.)
- 22 MR. JACKSON: There are two columns in this
- 23 particular paper.
- Mr. Bradbury, are you the Michael Bradbury
- 25 that wrote this?

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1 WITNESS BRADBURY: I am one of three authors
2 on this paper, yes.
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- 3 MR. JACKSON: The . . . In the . . .
- 4 (Pause in proceedings.)
- 5 MR. JACKSON: Do you agree with the statement
- 6 in the left column --
- 7 Can we go up just a bit.
- 8 (Scrolling through document.)
- 9 MR. JACKSON: The other -- The other -- I'm
- 10 sorry. Down.
- 11 (Scrolling through document.)
- MR. JACKSON: Do you agree with the statement
- 13 that (reading):
- 14 "Black Rails are secretive and
- difficult to detect . . ."
- 16 MR. MIZELL: Objection.
- So, we've received no tieing back to the
- 18 rebuttal testimony for this line of questioning.
- 19 We don't see any reference to this study
- 20 within the testimony, and Mr. Jackson hasn't
- 21 established what component of the rebuttal testimony
- 22 he's pursuing this line of questioning for.
- 23 CO-HEARING OFFICER DODUC: Mr. Jackson.
- 24 MR. JACKSON: Yes. This is -- This is a
- 25 continuation of the -- the questions about whether or

- 1 not you need to do the surveys before you determine
- 2 what kind of impacts there are going to be.
- 3 CO-HEARING OFFICER DODUC: I'm confused,
- 4 because Dr. Earle's testimony was that surveys would be
- 5 conducted before any constructions or otherwise
- 6 activities.
- 7 MR. JACKSON: And so I'm questioning
- 8 Mr. Bradbury on his own paper to see whether or not he
- 9 agrees with that.
- 10 CO-HEARING OFFICER DODUC: I'm -- I'm sorry.
- 11 I'm trying to -- So how does this paper tie
- 12 into Dr. Earle's testimony that surveys will be
- 13 conducted?
- 14 MR. JACKSON: His testimony that surveys will
- 15 be conducted depend upon what kind of surveys and the
- 16 ability for the surveys to be meaningful.
- 17 CO-HEARING OFFICER DODUC: Uh-huh.
- MR. JACKSON: And I'm trying to determine
- 19 whether or not someone who is -- has written a paper,
- 20 what form of survey he would recommend doing.
- 21 CO-HEARING OFFICER DODUC: That is beyond the
- 22 scope of his rebuttal testimony, that level of
- 23 specificity is.
- 24 (Pause in proceedings.)
- MR. JACKSON: Let's try the same document,

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1 DDJ-246, Page 2, right column.
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- 2 (Exhibit displayed on screen.)
- 3 MR. JACKSON: Is the large scale planning
- 4 effort . . . that you refer to in your paper complete?
- 5 MR. MIZELL: Objection: Same objection as
- 6 before.
- 7 CO-HEARING OFFICER DODUC: Same question to
- 8 you, Mr. Jackson, as before.
- 9 MR. JACKSON: I'm trying to determine whether
- 10 or not the little information that this paper says is
- 11 available to restoration practitioners and Land
- 12 Managers is an impediment to the AMM that is listed and
- 13 been quoted by Mr. Bradbury as his . . . in his
- 14 critique and his rebuttal of Mr. Shilling.
- 15 CO-HEARING OFFICER DODUC: It was
- 16 Dr. Earle's --
- MR. JACKSON: Dr. Shilling, excuse me.
- 18 CO-HEARING OFFICER DODUC: -- testimony, I
- 19 believe. And Dr. Earle's testimony -- Did you
- 20 reference this paper?
- 21 WITNESS EARLE: I did not.
- 22 (Pause in proceedings.)
- 23 MR. JACKSON: Dr. Bradbury, did you represent
- 24 this paper in anything you filed for this hearing?
- 25 (Pause in proceedings.)

- 1 CO-HEARING OFFICER DODUC: Regardless of
- 2 whether he did or not, Mr. Jackson, you certainly have
- 3 the right to introduce whatever documents you wish to
- 4 use in your cross-examination.
- 5 But you have to be able to link it to, at
- 6 least for this phase, either the rebuttal testimony,
- 7 DWR-1143 Second Revision, or the Supplemental EIR --
- 8 I'm sorry -- EIR supplement, whatever it's called.
- 9 Administrative Draft, yes, that long title.
- 10 So that is what I'm struggling with.
- MR. JACKSON: And so the question is to
- 12 Mr. Bradbury to determine -- to let me know whether or
- 13 not he referenced this document in anything that he's
- 14 filed, his testimony, in this particular hearing.
- 15 CO-HEARING OFFICER DODUC: Mr. Mizell.
- MR. MIZELL: Yes.
- 17 Mr. Bradbury's testimony is very short,
- 18 consists --
- 19 CO-HEARING OFFICER DODUC: It is.
- 20 MR. MIZELL: -- of about two paragraphs and
- 21 does not contain a reference to this study.
- 22 CO-HEARING OFFICER DODUC: Mr. Jackson,
- 23 please -- Sustained.
- I'm now sustaining the objection. Please move
- 25 on.

- 1 MR. JACKSON: I think that's it.
- 2 CO-HEARING OFFICER DODUC: Thank you.
- 3 MR. JACKSON: Oh, excuse me.
- 4 CO-HEARING OFFICER DODUC: In fact, didn't you
- 5 have questions for Dr. Grimaldo?
- 6 MR. JACKSON: I do. But I also have a few
- 7 questions -- and it's a very few -- that were left with
- 8 me by Mr. Keeling before he left to start doing the
- 9 written motion.
- 10 CO-HEARING OFFICER DODUC: And so you're
- 11 asking questions --
- 12 MR. JACKSON: On behalf -- On behalf of
- 13 Mr. Keeling.
- 14 CO-HEARING OFFICER DODUC: Go ahead.
- 15 And how much additional time will you need for
- 16 that?
- 17 MR. JACKSON: Looking at this, in his usual
- 18 succinct fashion, probably no more than 10 minutes.
- 19 CO-HEARING OFFICER DODUC: And then you have
- 20 questions for Dr. Grimaldo?
- MR. JACKSON: Yes, but they are . . .
- They're about his summary of opinions.
- 23 CO-HEARING OFFICER DODUC: And so would 15
- 24 minutes do?
- MR. JACKSON: 15 will do.

- 1 CO-HEARING OFFICER DODUC: All right.
- 2 MR. JACKSON: Dr. -- Could we put up DWR-1219
- 3 at Page 4, Line 12 to Page 8, Line 3.
- 4 (Exhibit displayed on screen.)
- 5 MR. JACKSON: And, Dr. Earle, in this section
- 6 of your testimony, you rebut Dr. Shilling's opinion
- 7 that construction and operation of the CWF will
- 8 interfere with wildlife movements caused by roads and
- 9 other linear features and, in particular, by the
- 10 mechanisms of habitat, fragmentation, direct mortality,
- 11 and aversion effects, as well as light- and
- 12 noise-induced effects; correct?
- 13 WITNESS EARLE: That's correct.
- 14 MR. JACKSON: In this part of your written
- 15 Part 2 rebuttal testimony, DWR-1219, from Page 4,
- 16 Line 12 through Page 8, Line 3, I notice that, besides
- 17 citing to Dr. Shilling's testimony itself, you cite the
- 18 following exhibits to support your opinions:
- 19 SWRCB-102, SWRCB-111, SWRCB Appendix 5J, and LAND-148,
- 20 the 2007 Dooling and Popper study.
- 21 Did he miss any?
- 22 CO-HEARING OFFICER DODUC: And the point of
- 23 this question is?
- 24 MR. JACKSON: I have four questions following
- 25 this, and one of them has to do with quantitative

1 analysis, which I think we probably beat up pretty

- 2 well.
- 3 (Pause in proceedings.)
- 4 CO-HEARING OFFICER DODUC: As I take it, the
- 5 last question you asked was simply iteration of the
- 6 references that --
- 7 MR. JACKSON: Right. It's a foundational
- 8 question to -- to determine whether or not there's --
- 9 there's something other than what he -- what he quoted
- 10 as these exhibits --
- 11 CO-HEARING OFFICER DODUC: Dr. Earle.
- 12 MR. JACKSON: -- in his testimony.
- 13 MR. MIZELL: I'd like to object.
- 14 Is the question misstating the record? And it
- 15 is likely a -- simply an oversight because of the line
- 16 break.
- 17 But the reference to Appendix 5J was reflected
- 18 as just SWRCB Appendix J. It should be SWRCB-5.
- 19 MR. JACKSON: Appendix 5J, correct.
- 20 CO-HEARING OFFICER DODUC: Dr. Earle, did you
- 21 rely on anything else?
- 22 WITNESS EARLE: Based on a brief review of the
- 23 text, I believe that is an accurate inventory.
- MR. JACKSON: In preparing this rebuttal of
- 25 Dr. Shilling's Part 2 testimony on these issues, did

- 1 you yourself perform any quantitative analysis of the
- 2 effects of the CWF regarding noise and traffic?
- 3 MR. MIZELL: Objection: Asked and answered.
- 4 CO-HEARING OFFICER DODUC: Sustained.
- 5 MR. JACKSON: I agree.
- 6 CO-HEARING OFFICER DODUC: You actually asked
- 7 that.
- 8 MR. JACKSON: What?
- 9 CO-HEARING OFFICER DODUC: We actually went
- 10 through that already.
- 11 MR. JACKSON: We did.
- 12 In preparing this rebuttal of Dr. Shilling's
- 13 Part 2 testimony on these issues, did you yourself
- 14 perform any independent analysis of the impacts of the
- 15 CWF?
- MR. MIZELL: Objection: Asked and answered.
- 17 CO-HEARING OFFICER DODUC: Actually, that's
- 18 slightly different. Independent analysis.
- 19 MR. JACKSON: Right.
- 20 WITNESS EARLE: My rebuttal testimony presents
- 21 what I hope is a rational connected argument rebutting
- 22 Dr. Shilling's testimony.
- 23 Such an argument can be described as an
- 24 analysis. And in places, it cites numbers and can,
- 25 therefore, be characterized as quantitative.

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1 MR. JACKSON: But that's the -- That's the
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- 2 limit of what you're relying on for the -- for your
- 3 testimony.
- 4 MR. MIZELL: I'd like to object to that -- to
- 5 the question, both this one and the previous, as to
- 6 their probative value in this case.
- 7 Dr. Earle is a well-qualified expert. He is
- 8 capable and permitted to rely upon the expertise of
- 9 others. In this case, he has copiously cited to those
- 10 other instances --
- 11 CO-HEARING OFFICER DODUC: Say that word
- 12 again. "Copiously."
- MR. MIZELL: Yes.
- 14 CO-HEARING OFFICER DODUC: Sustained,
- 15 Mr. Mizell.
- MR. JACKSON: At Page 12, Lines 22-24 of your
- 17 testimony, DWR-1219, you state your opinion (reading):
- 18 ". . . That the minimization and
- 19 mitigation commitments for Sandhill Crane
- 20 would still be reasonably protective of
- 21 this species."
- Is that right? I mean, is that correct?
- 23 WITNESS EARLE: I -- That is an accurate
- 24 reading of Lines 22 to 24.
- 25 MR. JACKSON: In this context, what do you

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1 mean by "reasonably protective"?
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- WITNESS EARLE: As I've stated earlier, my
- 3 inference of reasonable protection for fully protected
- 4 species is based both upon my professional opinion as a
- 5 Biologist based on the analyses that have been
- 6 performed by these species, and also upon the approval
- 7 and findings issued by CDFW for the EIR and associated
- 8 documents.
- 9 This particular section that you're citing is
- 10 preceded immediately by a discussion of the findings in
- 11 the Administrative Draft Supplemental EIR/EIS, which
- 12 has not been acknowledged in findings published by
- 13 CDFW.
- 14 And with regard to that, I explained my
- 15 rationale for interpreting the supplemental analysis as
- 16 indicating a reduction in impacts to Sandhill Crane
- 17 and, therefore, consistent with the opinion I developed
- 18 based on the earlier analyses.
- 19 MR. JACKSON: Thank you, sir.
- 20 Could we have DWR-1222 up on the screen.
- 21 (Exhibit displayed on screen.)
- MR. JACKSON: The questions are . . .
- Oh, let's start on Page 2, Line 15 --
- 24 (Exhibit displayed on screen.)
- 25 MR. JACKSON: -- "Overview of Testimony."

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1
             The first question is: Mr. Grimaldo, on
   Line 20, you indicate that (reading):
 2
                  "These studies" -- that you're
 3
 4
             talking about up above that -- "provide
 5
             new information and augment the
             information submitted in the . . . 2010
 6
 7
             Flow Policy Report and the . . . 2012
 8
             Water Quality Control Plan Workshop
 9
             (sic), relied on by several parties."
             Were those available to -- to you at the time
10
   DWR put on its case in chief in Part 2?
11
             CO-HEARING OFFICER DODUC: Ms. Morris.
12
13
             MS. MORRIS: Sorry. I'm moving slow today.
             Objection as to relevance.
14
15
             CO-HEARING OFFICER DODUC: Actually, I do see
    the relevance, but, Mr. Jackson, would you like to
16
   respond?
17
18
             MR. JACKSON: Well, I -- I do believe it's
   relevant. I mean, I don't know how else to respond.
19
             CO-HEARING OFFICER DODUC: Am I to understand
20
21
    that you are trying to ascertain whether this is
   appropriate rebuttal testimony or whether it should
22
   have been in the case in chief?
23
24
             MR. JACKSON: Correct.
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CO-HEARING OFFICER DODUC: On that ground, I

25

- 1 will overrule and ask Mr. -- Dr. Grimaldo to answer.
- 2 WITNESS GRIMALDO: So, I'm not sure I
- 3 understand --
- 4 CO-HEARING OFFICER DODUC: Microphone on,
- 5 please.
- 6 WITNESS GRIMALDO: I'm not sure I understand
- 7 the question because I don't know the -- the date of
- 8 the case in chief.
- 9 MR. JACKSON: Well, for the purposes of
- 10 speeding it up, let's assume that the case in chiefs
- 11 (sic) were due in . . . May.
- Was this new information available in May?
- 13 CO-HEARING OFFICER DODUC: May I rephrase your
- 14 question, Mr. Jackson.
- MR. JACKSON: Sure.
- 16 CO-HEARING OFFICER DODUC: In this testimony,
- 17 Dr. Grimaldo, is there a specific timeframe during
- 18 which you believe this progress and new information was
- 19 developed?
- 20 WITNESS GRIMALDO: Yes. I would say most of
- 21 this information has started coming out since -- since
- 22 the publication in 2017. I'm looking at the dates.
- 23 "Accepted, April 2017."
- 24 And there was also information provided in
- 25 Exhibit 1346 in a presentation that I gave to the Smelt

- 1 Workshop in 2016, and other -- another presentation
- 2 that I provided as Exhibit -- bear with me -- 1321 that
- 3 was presented this past March in 2018.
- 4 So, most of the new research that's been
- 5 emerging has been coming out in the last year or two.
- 6 CO-HEARING OFFICER DODUC: All right. Thank
- 7 you.
- 8 MR. JACKSON: You indicate on Line 25 that you
- 9 are highlighting (reading):
- 10 "... New field studies ... modeling
- 11 work, and analyses that show Longfin
- 12 Smelt abundance and distribution is more
- seaward . . . than previously
- 14 recognized . . . "
- Haven't . . .
- 16 Wasn't that information available earlier
- 17 in -- in 2018?
- 18 CO-HEARING OFFICER DODUC: Who wants to
- 19 address this Mr. Berliner or Miss Morris?
- MS. MORRIS: You go first.
- MR. BERLINER: Okay.
- There may be a misunderstanding here.
- 23 Dr. Grimaldo's testimony concerns rebuttal,
- 24 and he's citing these studies as rebuttal to
- 25 Mr. Baxter.

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1 For instance, on Page 4, Line -- I guess it's
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- 2 6 or 7, it says(reading):
- 3 "In my testimony, I am rebutting
- 4 Mr. Baxter's testimony that Longfin Smelt
- 5 savage -- salvage increases under drier
- 6 conditions, " et cetera.
- 7 This is rebuttal testimony, and that's the
- 8 purpose for citing these more recent studies that
- 9 Mr. Baxter did not cite.
- 10 So the whole point is to show there's recent
- 11 work that ought to be considered before making these
- 12 contentions that Mr. Baxter made.
- 13 CO-HEARING OFFICER DODUC: And so your
- 14 objection is?
- MR. BERLINER: Mr. Jackson appears to be
- 16 trying to establish that this information should have
- 17 been presented in the Part 2 case in chief.
- But in the Part 2 case in chief, we were not
- 19 rebutting Mr. Baxter's testimony in this respect. We
- 20 were presenting, obviously, the case in chief part.
- So, the -- the questions don't seem to bear on
- 22 the relevance of why these studies were cited, and
- 23 that's my point.
- 24 CO-HEARING OFFICER DODUC: Ah, thank you.
- Miss Morris.

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1 MS. MORRIS: I'd join as irrelevant because
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- 2 it -- Again, these -- several of these cites are to
- 3 witnesses saying that the Flow Criteria Report and the
- 4 Water Quality Control Plan are the best-available
- 5 science.
- 6 And this witness is rebutting that by showing
- 7 that there are additional studies that haven't been
- 8 considered in those documents, so it's appropriate
- 9 rebuttal.
- 10 CO-HEARING OFFICER DODUC: All right.
- 11 Mr. Jackson, your response to that, if you have one?
- MR. JACKSON: Yes. That these studies . . .
- 13 The way they come in on rebuttal, they require
- 14 surrebuttal because they've never been mentioned in
- 15 this hearing before.
- 16 I'm trying to determine whether or not they
- 17 were available so that we can make the argument that,
- 18 if they weren't available prior to the case in chief,
- 19 then we need surrebuttal.
- 20 CO-HEARING OFFICER DODUC: Mr. Jackson, I --
- 21 MR. JACKSON: Mr. Baxter was not my witness.
- 22 CO-HEARING OFFICER DODUC: Mr. Jackson, I'm
- 23 going out on a limb here. I'm guessing you're going to
- 24 argue that the surrebuttal is necessary regarding of
- 25 when these studies were developed.

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1 MR. JACKSON: Well, I'm certainly going to be
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- 2 arguing that, if they're allowed -- if these opinions
- 3 and these -- and the supporting documents are allowed
- 4 into the record, then -- then we are going to need an
- 5 opportunity to rebut them.
- 6 CO-HEARING OFFICER DODUC: Okay. So --
- 7 MR. JACKSON: If they --
- 8 CO-HEARING OFFICER DODUC: So, you can make
- 9 that --
- 10 MR. JACKSON: If they aren't entered into the
- 11 record, then we may not. I'm trying to determine --
- 12 CO-HEARING OFFICER DODUC: And -- I'm sorry --
- 13 at this point, are you making a motion? What are you
- 14 doing?
- Because I -- Let me -- Let me say this:
- I sustained Mr. Berliner and Miss Morris'
- 17 objection, or clarification, that this is responding to
- 18 Part 2 case in chief testimony and, therefore, is
- 19 rebuttal testimony.
- 20 MR. JACKSON: Are we going to have a chance
- 21 to . . . surrebuttal?
- I mean, I don't care which way it goes. I
- 23 just want to make sure that I get an opportunity to --
- 24 to find other information rebutting these statements.
- 25 CO-HEARING OFFICER DODUC: And that is

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1 something we will discuss later. It's not appropriate
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- 2 as a subject matter for cross-examination of
- 3 Dr. Grimaldo.
- 4 MR. JACKSON: I'm simply trying to make a
- 5 record.
- 6 Now I have no further questions.
- 7 CO-HEARING OFFICER DODUC: Thank you.
- 8 All right. Do you need a break, Candace?
- 9 THE REPORTER: (Shaking head.)
- 10 CO-HEARING OFFICER DODUC: All right. Then
- 11 Miss Des Jardins is our final cross-examiner for these
- 12 witnesses.
- 13 And we do have a hard stop at 5:00 today.
- MS. DES JARDINS: Deirdre Des Jardins with
- 15 California Water Research.
- 16 I'd first like to bring up Dr. Grimaldo's
- 17 testimony, DWR-1222, Page 4.
- 18 (Exhibit displayed on screen.)
- 19 CROSS-EXAMINATION BY
- 20 MS. DES JARDINS: And Dr. Grimaldo, you state
- 21 here you're (reading):
- ". . . Rebutting Mr. Baxter's testimony
- 23 that Longfin Smelt salvage increases
- 24 under drier conditions, especially during
- 25 recent years when the 2009 Biological

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1 Opinions have been in effect."
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- Is that -- That's -- That's correct?
- 3 WITNESS GRIMALDO: That is correct.
- 4 MS. DES JARDINS: And that section is
- 5 rebutting --
- 6 I just -- I'm trying to clarify.
- 7 Can we go to the April 11th transcript that
- 8 you cite on Page 77? Just trying to clarify what
- 9 particular statements you're rebutting.
- 10 MR. LONG: I'm sorry. Did you say 11 --
- MS. DES JARDINS: 11th, 2018 transcript, yes.
- 12 (Exhibit displayed on screen.)
- MS. DES JARDINS: Thank you.
- 14 And please go to Page 77, which I believe
- 15 is -- it's a little bit later. It might be
- 16 Page 80 . . .
- 17 (Exhibit displayed on screen.)
- MS. DES JARDINS: There it is.
- 19 And then you cite Lines 13 to 15.
- 20 And I'm just confused because this appears to
- 21 be a discussion about why the Cache Slough complex is
- 22 an important spawning area for Longfin Smelt.
- 23 WITNESS GRIMALDO: So maybe we have the pages
- 24 mixed up, but if you do a search on "entrainment" in
- 25 this document, Dr. Bax -- Randy Baxter makes a comment.

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1 MS. DES JARDINS: Yeah. Maybe we can find
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- 2 where he says that.
- 3 WITNESS GRIMALDO: And maybe the .pdf I was
- 4 looking at had a different page.
- 5 MS. DES JARDINS: Yeah. Can we look for it?
- 6 It was Miss Ansley, I think.
- 7 WITNESS GRIMALDO: Yes. Yes, definitely under
- 8 the questions.
- 9 MS. DES JARDINS: I'm not seeing -- I guess --
- 10 Is it anywhere else?
- 11 WITNESS GRIMALDO: If you could keep going
- 12 down, please.
- MS. DES JARDINS: Yeah. Maybe from this.
- 14 (Scrolling through document.)
- 15 WITNESS GRIMALDO: Keep going.
- 16 (Scrolling through document.)
- 17 WITNESS GRIMALDO: Keep going.
- 18 (Scrolling through document.)
- 19 WITNESS GRIMALDO: I just reviewed this
- 20 statement before I came up here, so I'm trying to find
- 21 it.
- 22 (Pause in proceedings.)
- MS. DES JARDINS: This appears to be a
- 24 cross-examination on --
- 25 WITNESS GRIMALDO: Right.

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1 MS. DES JARDINS: -- Mr. Baxter on your work.
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- 2 It seems a little circular.
- 3 WITNESS GRIMALDO: No. This -- This isn't the
- 4 piece that I was referencing.
- 5 Maybe -- Maybe a search for "drier."
- 6 MR. BERLINER: Or perhaps it's .pdf Page 77?
- 7 MS. DES JARDINS: I checked that one as well.
- 8 We can try it. I mean, I just really wasn't
- 9 finding that statement by Mr. Baxter.
- 10 (Scrolling through document.)
- 11 WITNESS GRIMALDO: So, if you scroll up.
- 12 Maybe these are the lines actually that I was referring
- 13 to. This might be close to it.
- 14 (Scrolling through document.)
- 15 WITNESS GRIMALDO: As outflow gets lower,
- 16 according to that . . . Because -- Yes. I'd have to
- 17 speculate.
- But as outflow gets lower, because Longfin
- 19 larvae have already transferred, the adults tend to
- 20 move further into the Delta to spawn.
- MS. DES JARDINS: But that doesn't seem to --
- 22 That's not the same as him testifying (reading):
- ". . . That Longfin Smelt salvage
- 24 increases under drier conditions,
- 25 especially during recent years when the

- 1 2009 Biological Opinions have been in
- 2 effect."
- 3 He doesn't discuss salvage. His reference is
- 4 stating that the Cache Slough complex is an important
- 5 spawning area.
- 6 WITNESS GRIMALDO: In this case, he's
- 7 referencing that adults tend to move further into the
- 8 Delta to spawn, which is a source of entrainment risk.
- 9 But he does make a statement about entrainment
- 10 being a risk increasing during lower outflow periods.
- 11 Unfortunately, I have it marked in my computer but not
- 12 here.
- 13 And it was during questions -- questions from
- 14 Miss Ansley.
- 15 MS. DES JARDINS: Could -- I'm just wondering
- 16 if Mr. Baxter actually limited it to the Biological
- 17 Opinion years.
- Because I'm -- I'm not seeing that he -- that
- 19 most of his testimony was about the pelagic organism
- 20 decline --
- 21 WITNESS GRIMALDO: I --
- MS. DES JARDINS: -- and started significantly
- 23 earlier.
- 24 MR. MIZELL: Objection: Misstates the
- 25 witness' testimony.

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1 Dr. Grimaldo's citation of Mr. Baxter does not
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- 2 limit it to the '09 Biological Opinions --
- 3 MS. DES JARDINS: Well --
- 4 MR. MIZELL: -- especially during --
- 5 MS. DES JARDINS: -- it says (reading):
- 6 ". . . Especially during recent years
- 7 when the 2009 Biological Opinions have
- 8 been in effect."
- 9 And I would like to be able to know if
- 10 Mr. Baxter stated that, because, otherwise, he is
- 11 misstating Mr. Baxter's testimony, and the full
- 12 response, it only considers post-BiOps years.
- MR. MIZELL: To the extent that
- 14 Miss Des Jardins continues to want to find this
- 15 particular quotation, I would request that Dr. Grimaldo
- 16 be given the opportunity to find the quotation.
- We were working both off rough transcripts as
- 18 well as final transcripts. I recognize we did not
- 19 specify which of those two in this particular citation.
- But, if we could have a moment, Dr. Grimaldo
- 21 very well might be able to find the citation.
- 22 CO-HEARING OFFICER DODUC: Dr. Grimaldo, are
- 23 you able to locate that right now, or do you --
- 24 WITNESS GRIMALDO: It will take me a few
- 25 minutes to -- to get to my laptop and open it.

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1 CO-HEARING OFFICER DODUC: All right.
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- 2 WITNESS GRIMALDO: Maybe three minutes.
- 3 CO-HEARING OFFICER DODUC: Let's take a
- 4 five-minute break.
- 5 WITNESS GRIMALDO: Okay.
- 6 CO-HEARING OFFICER DODUC: Return at 4:05.
- 7 (Recess taken at 4:00 p.m.)
- 8 (Proceedings resumed at 4:06 p.m.:)
- 9 MR. JACKSON: Before you start again --
- 10 CO-HEARING OFFICER DODUC: Hold on,
- 11 Mr. Jackson.
- 12 MR. JACKSON: Okay.
- 13 (Pause in proceedings.)
- 14 CO-HEARING OFFICER DODUC: Go ahead.
- 15 MR. JACKSON: There was discussion evidently
- 16 right after lunch and my e-mail's litten (sic) up --
- 17 has lit up about: Are -- Is there any possibility that
- 18 the other members of this panel are coming back
- 19 tomorrow?
- 20 CO-HEARING OFFICER DODUC: No.
- 21 MR. JACKSON: Okay. Do we -- Are we going to
- 22 have time to get the brief in before we have to come
- 23 back here?
- 24 CO-HEARING OFFICER DODUC: I'm confused. What
- 25 was the last question?

1 MR. JACKSON: The people are writing portions

- 2 of the brief that we were --
- 3 CO-HEARING OFFICER DODUC: Yes. The motions
- 4 that you -- that Mr. Keeling, Miss Meserve --
- 5 MR. JACKSON: Right.
- 6 CO-HEARING OFFICER DODUC: -- and
- 7 Miss Des Jardins have.
- 8 MR. JACKSON: Right.
- 9 CO-HEARING OFFICER DODUC: Yes?
- 10 MR. JACKSON: And, so my question is, in terms
- 11 of organizing witnesses and lawyers, do we have an idea
- 12 whether or not those witnesses will be testifying this
- 13 week?
- 14 CO-HEARING OFFICER DODUC: That's what we
- 15 are -- That was the request Mr. Berliner made, which we
- 16 are taking under consideration.
- 17 MR. JACKSON: Then, as I understand, the
- 18 response to the briefs won't be -- were due on Friday.
- 19 CO-HEARING OFFICER DODUC: Friday.
- MR. JACKSON: So, the question becomes, it
- 21 seems more logical to have it be next week.
- 22 CO-HEARING OFFICER DODUC: The problem was,
- 23 according to Mr. Berliner, those witnesses are not
- 24 available next week until -- I believe it was
- 25 August 27th?

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1 MR. MIZELL: That's correct. After
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- 2 August 27th, they'll return.
- 3 MR. JACKSON: That . . .
- 4 CO-HEARING OFFICER DODUC: So you are
- 5 requesting that --
- 6 MR. JACKSON: That it be August 27th.
- 7 CO-HEARING OFFICER DODUC: Thank you,
- 8 Mr. Jackson.
- 9 MR. JACKSON: Okay.
- 10 CO-HEARING OFFICER DODUC: We'll take that
- 11 under consideration.
- 12 Miss Taber.
- MS. TABER: Thank you.
- 14 Kelly Taber on behalf of City of Stockton and
- 15 Sacramento Regional County Sanitation District.
- I apologize for raising a schedule issue.
- 17 CO-HEARING OFFICER DODUC: Have you or have
- 18 you not swapped with North Delta Water Agency?
- 19 MS. TABER: We have, but there -- It's -- As
- 20 you've noticed, it's very difficult to predict where
- 21 things are happening.
- 22 And Dr. Paulsen, who is testifying for three
- 23 witnesses (sic), has unavoidable conflicts in Southern
- 24 California this Thursday and next Thursday.
- In reviewing the schedule, it looks like there

- 1 could be a good chance that she could have to appear on
- 2 one of those two days and, therefore, I'm -- given the
- 3 need for her to arrange her travel and her
- 4 unavailability, I wonder if it's possible that she
- 5 would be able to present her testimony this Friday,
- 6 because I am somewhat concerned there might be a next
- 7 Friday, the 24th. I have been working to coordinate
- 8 with other parties. It appears there is flexibility in
- 9 the order, but . . .
- 10 CO-HEARING OFFICER DODUC: Is there any
- 11 objection to Dr. Paulsen, representing Group 13, 22 and
- 12 27, testifying on Friday?
- 13 MR. MIZELL: Unfortunately, yes. The
- 14 Department would object to that shift.
- 15 It would bring Dr. Paulsen substantially back
- 16 forward in the schedule. We've been preparing for
- 17 cross-examination for a couple weeks.
- 18 CO-HEARING OFFICER DODUC: Understand.
- 19 MR. MIZELL: Yeah.
- 20 CO-HEARING OFFICER DODUC: And I appreciate
- 21 that on behalf of Mr. Mizell.
- MS. TABER: And I understand.
- 23 So, looking ahead, just -- I will note right
- 24 as of now, we've been informed she does have an
- 25 obligation in Southern California on Thursday, the

- 1 23rd.
- 2 And so I don't know if we'll be having a
- 3 Friday, the 24th, but . . .
- 4 CO-HEARING OFFICER DODUC: But, in any case, I
- 5 would encourage you to, I guess, work with the other
- 6 parties in order to swap places, as necessary.
- 7 MS. TABER: Sure. Okay. Thank you.
- 8 MR. BERLINER: To the extent it's helpful, if
- 9 they want to schedule Dr. Paulsen, as we did once
- 10 before, I believe, for a date certain, that would be
- 11 fine.
- 12 CO-HEARING OFFICER DODUC: But just not this
- 13 Friday.
- MR. BERLINER: Exactly.
- 15 CO-HEARING OFFICER DODUC: Okay.
- 16 MS. TABER: Thank you. And so --
- 17 CO-HEARING OFFICER DODUC: Why don't you guys
- 18 get together.
- 19 MS. TABER: Assuming the hearing will still be
- 20 on the rebuttal phase through next Friday, then that
- 21 would work.
- 22 CO-HEARING OFFICER DODUC: I . . . would not
- 23 dare to estimate a timing with respect to all of this.
- 24 As you can tell, things are going as they go.
- MS. TABER: I appreciate that. Thank you.

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1 CO-HEARING OFFICER DODUC: All right.
```

- 2 Miss Des Jardins -- Oh, I'm sorry.
- 3 Dr. Grimaldo, we're back to you.
- 4 If you could please clarify the exact
- 5 placement in the transcript you are referring to,
- 6 Lines 6 through -- Well, actually, the line numbers
- 7 aren't straight -- 6 through 9ish on Page 4 of your
- 8 testimony.
- 9 WITNESS GRIMALDO: Right. We just found it.
- 10 And it's Page 77?
- 11 MR. MIZELL: That's correct.
- 12 So the citation to the page was correct in his
- 13 testimony. Citation on the line numbers did seem to be
- 14 offset. And, again, it may be because we were -- we
- 15 were working with the rough transcript at this time, so
- 16 we apologize.
- But you can find the statements Dr. Grimaldo's
- 18 referencing at the bottom of this page.
- 19 (Exhibit displayed on screen.)
- 20 MS. DES JARDINS: Which exact sentence are you
- 21 referring to? Can you read it?
- 22 WITNESS GRIMALDO: So one of the -- one of the
- 23 patterns that we see in this for the fish to move
- 24 farther and farther upstream in there, and their
- 25 spawning as flow reduces in their winter/early spring

- 1 spawning period.
- 2 CO-HEARING OFFICER DODUC: And -- I'm sorry.
- 3 I'm jumping in, Miss Des Jardins.
- 4 But how does that relate to your restatement
- 5 of Mr. Baxter's testimony?
- 6 WITNESS GRIMALDO: So, just to be clear on
- 7 that statement that I was making, I was just rebutting
- 8 that long -- Yeah. Mr. Baxter's testimony is that
- 9 Longfin salvage increases under drier conditions,
- 10 perhaps a better description would be that Longfin
- 11 Smelt movement increases upstream under drier
- 12 conditions.
- 13 The statement about "especially during recent
- 14 years under the 2009 Biological Opinions have been in
- 15 effect," that's -- that's my opinion, that -- that I'm
- 16 rebutting that statement -- I'm sorry -- that
- 17 characterization of Longfin Smelt distribution during
- 18 drier years.
- 19 MS. DES JARDINS: Can we go back to Exhibit
- 20 DWR-1222, please.
- 21 (Exhibit displayed on screen.)
- MS. DES JARDINS: I mean, then you go out and
- 23 you have a table of SWP and CVP Adult Longfin Smelt
- 24 salvage by water year.
- I mean, how does this relate to testimony

- 1 about moving of Delta Smelt into Cache Slough?
- 2 WITNESS GRIMALDO: This is not specifically
- 3 about movement into Cache Slough.
- 4 What this table demonstrates is that salvage
- 5 under dry, below normal, wet years and the last --
- 6 since the Biological Opinions have been in place, have
- 7 been really low, zero in most of those years, and
- 8 there's no pattern of water year or characterization
- 9 of -- of . . . of increased salvage or movement during
- 10 drier years.
- 11 So one of the hypotheses that we have is that
- 12 if Longfin Smelt do move upstream in drier years,
- 13 they'd be more vulnerable to salvage.
- 14 What this table shows is that, amazingly,
- 15 we've only salvaged --
- MS. DES JARDINS: I would like to --
- 17 WITNESS GRIMALDO: -- three Longfin Smelt.
- 18 MS. DES JARDINS: I would like to ask you to
- 19 stop.
- I would like to move to strike this section
- 21 because I think it is quite a leap from the Smelt
- 22 moving into Cache Slough to "this is what happens with
- 23 salvage post-2009."
- 24 And I'd like to strike Page 4 at 3 through
- 25 Page 6 at 16 in this section that is rebutting this

- 1 particular section. And I'd like to strike the
- 2 testimony he just provided on post-BiOp salvage,
- 3 because while you might like to make that point, it is
- 4 a big leap and it's beyond -- I argue it's beyond the
- 5 scope of rebuttal.
- 6 CO-HEARING OFFICER DODUC: Before you respond,
- 7 Mr. Mizell, Mr. Jackson.
- 8 MR. JACKSON: Yes. I -- I would like to join
- 9 in the Motion to Strike.
- Table 1 seems to be a table in search of
- 11 something to rebut.
- 12 CO-HEARING OFFICER DODUC: Mr. Mizell. Or
- 13 anyone wishing to respond to this motion by
- 14 Miss Des Jardins.
- MR. MIZELL: Certainly.
- 16 I believe that Dr. Grimaldo's answer to her
- 17 question as to how his testimony is tied to
- 18 Mr. Baxter's statement in the record was just answered,
- 19 and he provided a clear connection to the migration of
- 20 Smelt into the Cache Slough complex and how that would
- 21 be reflected or not in the -- in the Longfin salvage
- 22 numbers under the -- under the various trawls.
- 23 So I believe that he's -- he's clearly laid
- 24 out the connection just now in his answers, and we
- 25 would oppose the Motion to Strike.

- 1 CO-HEARING OFFICER DODUC: Actually,
- 2 Mr. Mizell -- perhaps I'll turn to others up here --
- 3 but that connection wasn't clear to me, which is why I
- 4 actually asked even before Miss Des Jardins voiced her
- 5 motion.
- 6 Dr. Grimaldo, perhaps if you would explain
- 7 again to this Engineer how the testimony by Mr. Baxter
- 8 at the bottom of Page 77 in the transcript translate
- 9 into your assertion of his testimony as reflected on
- 10 Lines 6 through 8 on Page 4.
- 11 WITNESS GRIMALDO: So, clearly, that's not
- 12 a -- If you go back to that, that's not a reference to
- 13 Cache Slough right there, so that was not
- 14 characterized --
- 15 CO-HEARING OFFICER DODUC: Okay.
- 16 WITNESS GRIMALDO: -- appropriately by
- 17 Miss Des Jardins.
- 18 If -- Can we go back to that statement,
- 19 please.
- 20 CO-HEARING OFFICER DODUC: Go back to the
- 21 transcript.
- 22 WITNESS GRIMALDO: The transcript.
- 23 CO-HEARING OFFICER DODUC: Okay.
- 24 WITNESS GRIMALDO: So one of the patterns that
- 25 we see is for fish to move furtherer and furtherer

1 upstream. And they're spawning as flow reduces into

- 2 the early winter/spring period.
- 3 CO-HEARING OFFICER DODUC: Okay.
- 4 WITNESS GRIMALDO: So that's not a --
- 5 CO-HEARING OFFICER DODUC: I'm sorry.
- 6 If we scroll down, there is the linkage to
- 7 Cache Slough.
- 8 WITNESS GRIMALDO: And there's a relationship
- 9 that exists for the San Joaquin River as well. That's
- 10 clearly stated, where the Project facilities are
- 11 located.
- 12 CO-HEARING OFFICER DODUC: Okay.
- 13 WITNESS GRIMALDO: So, given that the Project
- 14 facilities are located on the San Joaquin River,
- 15 there's a pretty plausible likelihood, high likelihood,
- 16 if that increase does occur on the San Joaquin River,
- 17 as stated by Mr. Baxter, that those would show up at
- 18 the -- at the salvage facility, and that that pattern
- 19 would be reflected in -- in dry -- in showing increased
- 20 salvage under drier years.
- 21 So if you go back to my table --
- 22 (Exhibit displayed on screen.)
- 23 WITNESS GRIMALDO: -- what I show is, in fact,
- 24 during the last 10, 11 years there, that there is no
- 25 pattern of increased movement as reflected by the

1 largest sampling device that we have in the system for

- 2 fish. In fact, what I see are only zeros.
- 3 If the assertion is that Longfin Smelt are
- 4 moving into the San Joaquin during drier years, we
- 5 should see higher numbers of them in the salvage
- 6 facility during critical and dry years.
- 7 CO-HEARING OFFICER DODUC: So you're refuting
- 8 Mr. Baxter's testimony of the movement, not the salvage
- 9 increase.
- 10 WITNESS GRIMALDO: That's -- That's correct.
- 11 CO-HEARING OFFICER DODUC: And I think,
- 12 earlier, you had testified -- or at least you had made
- 13 a correction to your testimony.
- Would you please repeat that?
- 15 WITNESS GRIMALDO: Yeah. That correction is
- 16 that I'm rebutting Mr. Baxter's testimony . . .
- Well, let's see.
- 18 That . . . I guess the correction would be
- 19 here that he didn't necessarily say that salvage
- 20 increases but -- but that movement into the San Joaquin
- 21 increases during drier years.
- 22 CO-HEARING OFFICER DODUC: And you are
- 23 rebutting that on your theory that, if that movement --
- 24 that movement would be reflected in salvage increase.
- 25 WITNESS GRIMALDO: That's not just based on my

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1 theory. That's also based on a paper that I cite in --
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- 2 in my testimony. It's Exhibit -- It's the Grimaldo
- 3 2009 -- Exhibit 1314 where I clearly show that salvage
- 4 increases as a function of -- of exports, and a
- 5 distribution of fish into the -- into the San Joaquin
- 6 River.
- 7 CO-HEARING OFFICER DODUC: And with that
- 8 change -- that correction in your testimony in Lines 6,
- 9 I guess, 6 through 8, how does that affect the
- 10 remainder of your testimony in this section?
- 11 WITNESS GRIMALDO: I'd have to review it for a
- 12 second, but I don't think it -- it changes my
- 13 testimony.
- 14 So then I go into the mechanisms where I think
- 15 that, if there was increased movement into the South
- 16 Delta, for example, we'd see increased salvage of -- of
- 17 juvenile fish.
- 18 And if you refer to Table . . .
- 19 MS. DES JARDINS: Excuse --
- 20 WITNESS GRIMALDO: I'm sorry.
- 21 MS. DES JARDINS: -- me. This -- This
- 22 section -- This specific Section A, Adult Longfin
- 23 Salvage/Entrainment, is only about adult entrainment
- 24 and only references Mr. Baxter's testimony.
- 25 So I'm talking about Section A on Page

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1 (sic) --
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- 2 CO-HEARING OFFICER DODUC: Yes.
- 3 MS. DES JARDINS: -- III A.
- 4 CO-HEARING OFFICER DODUC: That's what I'm
- 5 looking at.
- 6 MS. DES JARDINS: Yeah.
- 7 CO-HEARING OFFICER DODUC: That's what I'm
- 8 looking at.
- 9 And based on Dr. Grimaldo's correction of his
- 10 testimony, or at least the correction of his citation,
- 11 his attributation -- or attribute to Mr. Baxter's
- 12 testimony.
- 13 WITNESS GRIMALDO: So in looking at -- There's
- 14 two figures that I provide in Figure 1 and Figure 2 --
- 15 CO-HEARING OFFICER DODUC: Um-hmm.
- 16 WITNESS GRIMALDO: -- on Pages 6 and Page 7 --
- 17 (Exhibit displayed on screen.)
- 18 WITNESS GRIMALDO: -- where you can pull up
- 19 the mean percentage --
- 20 MS. DES JARDINS: Excuse me. Those are
- 21 juveniles. That's a different section.
- 22 WITNESS GRIMALDO: Okay. Well, then, we'll
- 23 pull up Page 6.
- 24 (Exhibit displayed on screen.)
- 25 WITNESS GRIMALDO: Yeah, those are adult.

- 1 That's correct.
- 2 So when you look at the mean number of Adult
- 3 Longfin salvage as a proportion of the population, as I
- 4 pointed out in my testimony, those numbers are
- 5 extremely low. It's less than 1 percent of the
- 6 population.
- 7 And, in my interpretation, I don't see a
- 8 pattern of increased salvage with these different water
- 9 year-types. This is quite variable.
- 10 CO-HEARING OFFICER DODUC: All right. Based
- 11 on that correction of his testimony, motion is denied.
- MS. DES JARDINS: All right. I'd like to pull
- 13 up Exhibit DDJ-319, please.
- 14 (Exhibit displayed on screen.)
- MS. DES JARDINS: Oh, and, Dr. Grimaldo, you
- 16 did recognize that Mr. Baxter's response did not limit
- 17 it to any particular years?
- This is a copy of the 2007 Pelagic Organism
- 19 Decline Synthesis Report.
- 20 Are you aware of this document?
- 21 WITNESS GRIMALDO: Yes, I'm aware of this
- 22 document.
- 23 MS. DES JARDINS: Okay. And I'd like to go to
- 24 Page 18.
- 25 (Exhibit displayed on screen.)

```
1
             MS. DES JARDINS: And . . .
             Do you see in the last paragraph where it
 2
 3
   states (reading):
                  "One piece of evidence that export
             diversions played a role in the POD . . .
 5
             substantial increases in winter CVP and
 6
 7
             SWP salvage that occurred
 8
             contemporaneously . . . "
 9
             It says (reading):
                  "Increased winter entrainment of
10
             Delta Smelt, Longfin Smelt and Thredfin
11
12
             Shad represents a loss of pre-spawning
13
             adults and all their potential progeny."
             Are you aware of -- Do you -- Do you see those
14
    statements in the document?
15
16
             WITNESS GRIMALDO: Yes, I see those
    statements.
17
18
             And I believe the report was published in
    2008. And, since then, I published a paper in 2009.
19
   And then the evidence provided once again in my figures
20
    Table 2 and -- I mean, in Figures 2 and -- Figures 1
21
    and 2 where you would actually adjust for the size of
22
    the population.
23
24
             It is my opinion, as I provided in my
    testimony, that those source of the entrainment as a
25
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- 1 source of mortality for Longfin Smelt is very low.
- 2 From those tables, it's less than 1 percent of the
- 3 population.
- 4 I also provided a paper by Dr. Kimmerer -- I
- 5 don't remember the exhibit number here -- his 2008
- 6 paper where entrainment losses that he estimated were
- 7 on the 20 to 30 percent range in some of the high
- 8 years.
- 9 So, in comparative -- In my opinion, and
- 10 looking at the comparison, and as I provide in my
- 11 testimony, entrainment has been a very low source of
- 12 mortality for Longfin Smelt.
- 13 And this -- This document was done prior to
- 14 when all these -- As I mentioned earlier, these new
- 15 studies started coming out and we started learning more
- 16 about the distribution of Longfin Smelt.
- MS. DES JARDINS: Let's -- Let's go back to
- 18 DWR-1222, please.
- 19 (Exhibit displayed on screen.)
- 20 MS. DES JARDINS: So -- So you are looking at
- 21 entrainment.
- 22 How did you calculate the population
- 23 abundance?
- 24 WITNESS GRIMALDO: So, this work was actually
- 25 completed by Dr. Greenwood as part of the ITP

- 1 Application for California WaterFix.
- 2 And I don't recall the exact survey that he
- 3 used, but the entrainment losses, as you see at the
- 4 bottom, were developed by DFG.
- 5 So, in a -- in a rough sense, we took the --
- 6 the estimated number of fish, probably expanded by
- 7 volume is what Dr. Greenwood likely did, and divided
- 8 the entrainment loss by the size of the population from
- 9 those trawl surveys.
- 10 MS. DES JARDINS: So how -- The real question
- 11 is: How did you go -- Let's pull up Exhibit DDJ-282,
- 12 please, which is in the -- That would be in my
- 13 submitted exhibits, so in the case in chief.
- 14 It's DD -- Exhibit DDJ-282 as found on the
- 15 website.
- 16 (Exhibit displayed on screen.)
- 17 MS. DES JARDINS: So can you scroll down just
- 18 to the bottom.
- 19 (Scrolling through document.)
- MS. DES JARDINS: There we go.
- 21 This is the Fall Midwater Trawl Longfin Smelt
- 22 Annual Abundance Indices from the DFG website.
- Do you recognize these graphs?
- 24 WITNESS GRIMALDO: I recognize that graph.
- MS. DES JARDINS: And . . . they show that the

1 Abundance Indices have fallen to record lows in recent

- 2 years; is that not correct?
- 3 WITNESS GRIMALDO: I would interpret that that
- 4 graph shows that the Fall Midwinter Trawl Longfin
- 5 Indices have declined.
- 6 MS. DES JARDINS: Given -- Given the crash in
- 7 population, wouldn't you expect the salvage numbers at
- 8 the pumps to decrease as well?
- 9 WITNESS GRIMALDO: So, once again, I -- That's
- 10 why I cited Dr. Greenwood's work on the ITP
- 11 Application, because he corrected for the size of the
- 12 population in his estimate.
- 13 And it was less than 1 percent for all years,
- 14 except for one year for the adults and one year for the
- 15 juveniles.
- MS. DES JARDINS: Let's go to Exhibit
- 17 DWR-1222.
- 18 And I'd like to find the cite to --
- 19 (Exhibit displayed on screen.)
- 20 MS. DES JARDINS: Where do you cite to
- 21 Dr. Greenwood's work on the ITP Application?
- 22 WITNESS GRIMALDO: It's cited in the testimony
- 23 up -- up above.
- MS. DES JARDINS: Okay.
- 25 WITNESS GRIMALDO: That's where that figure

```
1 came from.
```

- 2 (Exhibit displayed on screen.)
- 3 MS. DES JARDINS: Calculated by dividing
- 4 salvage per the population size for water years.
- 5 But it just represents that the -- that --
- 6 Don't you have to extrapolate from the trawl data to an
- 7 estimated population size? And isn't . . . to -- to
- 8 get -- get those population estimates?
- 9 WITNESS GRIMALDO: So, I don't recall all the
- 10 details of what Dr. Greenwood did in his testimony,
- 11 but -- And it's my understanding that he did provide
- 12 the -- the correct application of volumes for each
- 13 region for the number of fish that were captured in the
- 14 trawl surveys.
- MS. DES JARDINS: Wouldn't -- Wouldn't your
- 16 estimate of the percentage of fish entrained be very
- 17 sensitive to -- to populate -- to your population
- 18 estimates?
- 19 And if -- if the population estimates reduced
- 20 much larger estimates of population, wouldn't that
- 21 introduce errors?
- 22 WITNESS GRIMALDO: I'm sorry. I think you
- 23 asked two questions there.
- MS. DES JARDINS: Yes, I did. Apologies.
- 25 So, isn't -- isn't there some uncertainty in

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1 estimating population data from trawl data?
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- 2 WITNESS GRIMALDO: Yes.
- 3 MS. DES JARDINS: And isn't that an area of
- 4 controversy?
- 5 WITNESS GRIMALDO: I'm not aware of where that
- 6 controversy's been provided.
- 7 Can you elaborate or --
- 8 MS. DES JARDINS: Didn't you --
- 9 WITNESS GRIMALDO: -- refer to something?
- 10 MS. DES JARDINS: Didn't you testify in
- 11 litigation over the Federal BiOp?
- 12 WITNESS GRIMALDO: Are you asking if I
- 13 testified --
- MS. DES JARDINS: Yes.
- 15 THE WITNESS: -- in the Federal case for The
- 16 NFMS Fish and Wildlife Service?
- 17 Yes, on behalf of the -- the Federal
- 18 government as an expert witness.
- 19 MS. DES JARDINS: And did you testify about
- 20 population -- similar testimony about population
- 21 estimates?
- MR. MIZELL: I'm going to file an objection as
- 23 beyond the scope of his rebuttal testimony at this
- 24 point.
- I don't believe we've seen any tie-back to

1 previous testimony Dr. Grimaldo may have given in years

- 2 past during lawsuits.
- 3 MS. DES JARDINS: Well, he said he's not aware
- 4 that it's an area of controversy, and I wanted to ask
- 5 because I -- I believe that salvage densities were a
- 6 huge area of litigation in the Federal BiOps and was an
- 7 area of controversy.
- 8 MR. MIZELL: I believe the extrapolating
- 9 answer that was related to his testimony into a global
- 10 statement as to any work he's ever done is beyond the
- 11 scope of this rebuttal testimony.
- 12 CO-HEARING OFFICER DODUC: Sustained.
- MS. DES JARDINS: Okay. Let's see. So I did
- 14 that, that.
- 15 And then I'd like to go to Page 8 at --
- 16 Page 12 at 8.
- 17 (Pause in proceedings.)
- 18 CO-HEARING OFFICER DODUC: Miss Des Jardins,
- 19 before you continue.
- 20 Are all your questions directed to
- 21 Dr. Grimaldo or --
- MS. DES JARDINS: Yes, they are.
- 23 CO-HEARING OFFICER DODUC: Okay. In that
- 24 case, do you have redirect for Mr. Bradbury or
- 25 Dr. Earle?

```
1
             MR. MIZELL: I have no redirect for those
 2
   witnesses.
             CO-HEARING OFFICER DODUC: Thank you,
 3
 4 Dr. Earle and Mr. Bradbury.
 5
             (Witnesses excused.)
 6
             MS. DES JARDINS: Let's scroll up to Line 8,
7
   please.
             (Scrolling through document.)
 8
 9
             MS. DES JARDINS: So --
10
             WITNESS GRIMALDO: Line 8. Yes.
11
             MS. DES JARDINS: Line 8, yeah.
12
             In Line 7, you say (reading):
13
                  "It is noteworthy to point out that
             Juvenile Longfin Smelt are able to
14
15
             tolerate salinities up to 30 psu in the
             late spring and early summer . . . "
16
             And you cite a paper by MacWilliams.
17
18
             WITNESS GRIMALDO: That's correct.
19
             MS. DES JARDINS: So, let's go to Exhibit
20 DWR-1322.
21
                    (Pause in proceedings.)
22
             MS. DES JARDINS: Actually, I can backtrack
23
   later.
24
             I'd like to -- Are you aware that exhibit
25 DWR-1322 -- actually, it's Exhibit DWR-1322-Errata --
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1 is -- it's an EPA-funded study of . . .
             Let -- Let's go ahead and bring it up.
 2
 3
             Can you please bring in Exhibit
    DWR-1322-Errata.
 5
             (Exhibit displayed on screen.)
             CO-HEARING OFFICER DODUC: So, Dr. Grimaldo,
 6
    in your testimony, are you referring to 1322 or
 7
    1322-Errata, or does it matter?
 8
 9
             WITNESS GRIMALDO: It does matter. It would
    be 1322-Errata, because there's a link to a table that
10
    demonstrates my point there very well.
11
12
             I didn't realize that the link -- If you got
    it without the hyperlink, you wouldn't be able to open
13
    it, but there's a link in Table 2 that you need to open
14
    to see -- to -- to clearly demonstrate the point I was
15
    making there.
16
             (Exhibit displayed on screen.)
17
18
             MS. DES JARDINS: So, this is a discussion of
19
    (reading):
                  "3-D simulations of the
20
21
             San Francisco Estuary with Subgrid
22
             Bathymetry to Explore Long-Term Trends in
23
             Salinity Distribution and Fish
24
             Abundance."
```

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25

Correct?

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1 WITNESS GRIMALDO: That's correct.
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- MS. DES JARDINS: Let's scroll down.
- 3 (Scrolling through document.)
- 4 MS. DES JARDINS: This -- This is a study by
- 5 the EPA; isn't that correct?
- 6 WITNESS GRIMALDO: Not all of the authors work
- 7 for the EPA.
- 8 MS. DES JARDINS: Erin Foresman works for the
- 9 EPA, and then there were two other authors.
- 10 WITNESS GRIMALDO: I'm not sure where Erin
- 11 works anymore, but Michael and Aaron do work for
- 12 Anchor, so . . .
- MS. DES JARDINS: Yes. But at the time
- 14 Foresman worked at the EPA --
- 15 WITNESS GRIMALDO: That's my understanding,
- 16 yes.
- MS. DES JARDINS: -- correct?
- 18 Okay. So, there were the actual studies of
- 19 Longfin Smelt that went with this paper; correct?
- 20 WITNESS GRIMALDO: What studies are you
- 21 referring to?
- 22 MS. DES JARDINS: Let's pull up -- I believe
- 23 it's Exhibit DDJ -- DDJ-322.
- 24 (Exhibit displayed on screen.)
- MS. DES JARDINS: So this is the EPA web page.

```
1 It says (reading):
 2
                  "EPA created maps for six fish
 3
             species that show changes in abundance
             and distribution . . . "
 5
             Please continue scrolling down.
             (Scrolling through document.)
 6
 7
             MS. DES JARDINS: Scroll down.
             (Scrolling through document.)
 8
 9
             MS. DES JARDINS: (Reading):
10
                  "This work was published in
11
             the . . . San Francisco Estuary and
             Watershed Science."
12
13
             And it cites the paper you cite; correct?
14
             WITNESS GRIMALDO: Yes, it appears to cite the
15
    same paper.
16
             MS. DES JARDINS: And it also provides the
17
   maps?
18
             WITNESS GRIMALDO: That seems to be correct.
             MS. DES JARDINS: Can you pull up Exhibit
19
   DDJ-320, which is the map for Longfin Smelt.
20
21
                    (Pause in proceedings.)
22
             MS. DES JARDINS: That is on the memory stick
23
    I gave you.
24
             (Exhibit displayed on screen.)
25
             MS. DES JARDINS: And, Dr. Grimaldo, this
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- 1 shows --
- 2 Let's scroll out a little.
- 3 (Scrolling out.)
- 4 MS. DES JARDINS: So, does this show catch per
- 5 unit effort and salinity gradient in the San Francisco
- 6 Estuary?
- 7 WITNESS GRIMALDO: Yes. That shows Juvenile
- 8 Longfin Smelt catch per unit effort.
- 9 MS. DES JARDINS: And doesn't it show that
- 10 most of the Longfin Smelt are in salinities that are
- 11 below 30 psu?
- MR. MIZELL: So I'm going to object to the
- 13 characterization of the evidence globally. The chart
- 14 does read 1980, so if we can characterize it as a
- 15 single year's chart.
- 16 CO-HEARING OFFICER DODUC: So noted.
- MS. DES JARDINS: This goes from 1980 through
- 18 2012. I'm going to ask for a couple selected ones,
- 19 years.
- 20 WITNESS GRIMALDO: So, I think it would be
- 21 highly informative to scroll through the different maps
- 22 and reference my testimony that I say that Longfin
- 23 Smelt have, at this -- at this life stage, have low
- 24 dependence on low-salinity habitat, because I -- The
- 25 way that I interpret those maps, if you see them in the

1 orange and the yellow, that's in psu's, you know, from

- 2 12 to 20 for this year.
- 3 But you have to scroll through all the years
- 4 to get --
- 5 MS. DES JARDINS: Let's --
- 6 WITNESS GRIMALDO: -- a great understanding of
- 7 the point I was making in my testimony.
- 8 MS. DES JARDINS: Let's go ahead and scroll
- 9 through the next few, please.
- 10 (Scrolling through document.)
- MS. DES JARDINS: There's another one, 1981.
- 12 Let's go to --
- 13 WITNESS GRIMALDO: If we could pause for a
- 14 second.
- So, I just want to highlight here once again.
- 16 We're going from green, that greenish blue, so
- 17 we're already going over 6 psu, which has been defined
- 18 as low-salinity habitat for Delta Smelt.
- 19 We don't have a definition of low-salinity
- 20 habitat for Juvenile Longfin. I'm not aware of one.
- 21 But, in my opinion, just -- just my
- 22 interpretation of the map, I see a higher proportion of
- 23 Longfin in -- in salinities greater than 5 or 6 there
- 24 than I do in the freshwater for -- for this year.
- 25 MS. DES JARDINS: Well --

- 1 WITNESS GRIMALDO: Please scroll down.
- 2 MS. DES JARDINS: Excuse me.
- 3 But isn't there a definition -- There's
- 4 brackish water habitat, which would be, for example, in
- 5 Suisun Bay, in -- in this graph, and it's, you know,
- 6 like, 5 to 8 psu. And they are in there.
- 7 But isn't 30 psu right there at the very edge
- 8 of their distribution.
- 9 WITNESS GRIMALDO: If I can back to my
- 10 testimony for a second.
- I believe I said they were found up to 30 psu.
- 12 (Exhibit displayed on screen.)
- 13 CO-HEARING OFFICER DODUC: Yes. In late
- 14 spring and early summer.
- 15 WITNESS GRIMALDO: I don't even see the line
- 16 anymore.
- 17 Page 12.
- 18 CO-HEARING OFFICER DODUC: Page 12, Line 8.
- 19 WITNESS GRIMALDO: So, it's noteworthy to
- 20 point out that Juvenile Longfin Smelt are able to
- 21 tolerate salinities up to 30 psu, and you would -- you
- 22 could interpret that from some of these maps.
- 23 So this is pretty amazing. This is some of
- 24 the new information that I was discussing before,
- 25 because I don't think there was a recognition that

- 1 Juvenile Longfin Smelt were able to be in salinities
- 2 greater than 6 psu, yet alone all the way up to 30 psu
- 3 as these maps indicate.
- 4 CO-HEARING OFFICER DODUC: And while you're
- 5 there -- I'm sorry -- your reference to Exhibit
- 6 DWR-1322, should that be Exhibit DWR-1322-Errata?
- 7 WITNESS GRIMALDO: That's correct.
- 8 CO-HEARING OFFICER DODUC: Correct, that it
- 9 should be --
- 10 WITNESS GRIMALDO: 1322-Errata, right, which
- 11 provides the link to the -- to the Longfin Smelt maps
- 12 on Table 32 of that paper.
- MS. DES JARDINS: So, it says -- When you
- 14 say, "This study suggests that Juvenile Longfin Smelt
- 15 are not obligated to rear in low-salinity habitat," how
- 16 do you define "low-salinity habitat"?
- 17 WITNESS GRIMALDO: As I mentioned before, we
- 18 don't have an official definition for Delta -- for
- 19 Longfin Smelt. It's been mostly applied to Delta
- 20 Smelt.
- 21 I didn't define it here but, for the sake of
- 22 being consistent with Delta Smelt, I would say 5 or
- 23 6 psu would be consistent. And that might be
- 24 consistent with other papers that published work on
- 25 Longfin Smelt, but there has not been a true definition

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1 about what that is exactly.
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- 2 MS. DES JARDINS: Isn't it understood that
- 3 Longfin Smelt rear in brackish water habitat?
- 4 WITNESS GRIMALDO: What life stage are you
- 5 talking about? Because it's not understood. That's
- 6 part of my testimony.
- 7 (Pause in proceedings.)
- 8 MS. DES JARDINS: These were -- Let -- Let's
- 9 go back to Exhibit DDJ-320, please.
- 10 (Exhibit displayed on screen.)
- MS. DES JARDINS: Yeah, that's it.
- So, does brackish water habitat -- Let's --
- 13 Let's go down to -- through a few more of these.
- 14 But brackish water habitat is . . . down to
- 15 about the -- the blue-green, it looks like there, up to
- 16 about 14 that they primarily rear in. I mean, it shows
- 17 them using both fresh and brackish.
- 18 We could scroll through a few more years if
- 19 you'd like, where the . . .
- 20 (Scrolling through document.)
- MS. DES JARDINS: Yeah.
- 22 So, in . . . Isn't -- Isn't this -- And isn't
- 23 it a case that the -- the -- that brackish salinity
- 24 zone expands in -- into San Pablo Bay in -- in very wet
- 25 years, as is shown on this graph?

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1 WITNESS GRIMALDO: Your question is: Does the
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- 2 brackish zone extend into San Pablo Bay --
- 3 MS. DES JARDINS: San Pablo Bay during wet.
- 4 WITNESS GRIMALDO: -- during wet years?
- 5 MS. DES JARDINS: Yeah.
- 6 WITNESS GRIMALDO: Yes. That's consistent
- 7 with my understanding of how outflow, not only from the
- 8 Delta but from other -- other -- other tributaries
- 9 along the Bay, influences the salinity zone in
- 10 San Pablo Bay.
- MS. DES JARDINS: So let's -- I'd like to go
- 12 back to your testimony, Page 8 at 19.
- 13 (Exhibit displayed on screen.)
- MS. DES JARDINS: 19, you say (reading):
- ". . . Analysis of CDFW Smelt Larval
- 16 Survey Data shows that over 50 percent
- of . . . larvae are found in Suisun Bay."
- But isn't -- I mean, isn't the San Pablo Bay
- 19 also important and -- and the brackish water habitat in
- 20 both estuaries?
- 21 WITNESS GRIMALDO: So, I think there's some
- 22 confusion on the life stages.
- 23 So the maps, just to be clear, that we were
- 24 showing were for the juvenile life stages --
- MS. DES JARDINS: And this is for larval.

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1 WITNESS GRIMALDO: -- and for larval.
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- 2 And I think the important point here is, yes,
- 3 as I provide in the figure, if you go to it, and I show
- 4 this, Figure 4 on Page 10 of my testimony --
- 5 (Exhibit displayed on screen.)
- 6 WITNESS GRIMALDO: -- provides some of the
- 7 exciting new work that we're -- we're working on.
- 8 So, it's hard to see there, but the green --
- 9 the green dots show Larval Longfin in 2017, and the red
- 10 dots show Larval Longfin in 2016.
- 11 And I should note that Larval Longfin haven't
- 12 been sampled in this rigorous way in the monitoring
- 13 programs in shallow water.
- 14 So what we're showing is that Longfin are
- 15 rearing in San Pablo Bay in much higher abundances than
- 16 previous recognized.
- 17 There's two exhibits that say that Larval
- 18 Longfin Smelt are spawning and rearing in fresh water.
- 19 So this is exciting in the work, is that we're showing,
- 20 no, they're not just spawning and living in fresh water
- 21 at this life stage.
- MS. DES JARDINS: Going back to Exhibit
- 23 DDJ-320. It's now 1982.
- 24 (Exhibit displayed on screen.)
- MS. DES JARDINS: Let's -- Let's -- Scroll

- 1 forward to, for example, 2006.
- 2 WITNESS GRIMALDO: So to be clear, this is for
- 3 the juvenile life stage.
- 4 MS. DES JARDINS: Yeah. But, like, isn't
- 5 it -- I mean, 2006 was another record wet year. And
- 6 isn't it the case that it's not necessarily that new
- 7 that Longfin Smelt use San Pablo Bay in record wet
- 8 years like 2006 and 2017?
- 9 WITNESS GRIMALDO: So, Longfin Smelt are not
- 10 just using -- if you look at the map there, and it's
- 11 not just wet years. They're using South Bay, Central
- 12 Bay. They use the whole estuary. In fact, I don't
- 13 think you can see the bottom there, but they're even in
- 14 Coyote Creek in some years.
- To be clear, on these maps, the Department of
- 16 Fish and Wildlife stopped measuring Juvenile Longfin
- 17 less than 40 millimeters, I believe, in the 1990s. So,
- 18 it's not showing the full number of the Juvenile
- 19 Longfin as -- as they did in the earlier '90s maps.
- MS. DES JARDINS: But, again, let's -- Let's
- 21 go -- Scroll up to, for example, 2014.
- Oh, I don't know if we have 2014.
- How about 2009? That was a drought year.
- 24 (Exhibit displayed on screen.)
- MS. DES JARDINS: So, isn't it true, for

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1 example, in this drought year, there's significantly
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- 2 fewer Longfin Smelt caught? It shows there -- You
- 3 know, there's fewer and -- and the -- the Bay is much
- 4 more -- much more saline.
- 5 WITNESS GRIMALDO: So, once again, this
- 6 illuminates something very interesting that I was
- 7 saying in my testimony, that there's Longfin occurring
- 8 up to 30 psu.
- 9 They don't appear to -- My interpretation is,
- 10 they're not dependent on low-salinity habitat at this
- 11 life stage; that a question about less fish during
- 12 drier years, that's provided in several testimonies and
- 13 papers, that there is a relationship with the recruits
- 14 and their abundance during the fall . . . from --
- 15 from -- Well, I'll just leave it at that.
- 16 MS. DES JARDINS: Okay. Can we go to Page 10
- 17 at 25, of your testimony. DWR-1222.
- 18 (Exhibit displayed on screen.)
- 19 CO-HEARING OFFICER DODUC: And just a time
- 20 check, Miss Des Jardins.
- We need to adjourn in less than 10 minutes.
- MS. DES JARDINS: I'm almost done.
- 23 So, the --
- I can finish up within the 10 minutes.
- So you state (reading):

- 1 ". . . New findings suggest that Longfin
- 2 Smelt rely on flow from local
- 3 tributaries . . . "
- 4 Are you aware that the flow from those
- 5 tributaries as a percentage of contribution to
- 6 San Pablo Bay is much smaller than the flow from the
- 7 Sacramento River?
- 8 WITNESS GRIMALDO: I'm not aware of the exact
- 9 magnitude relative to Delta outflow, so I don't know
- 10 that number.
- 11 But I would presume, because their smaller
- 12 channel capacity in volume, that they would contribute
- 13 less, which is interesting because I'm not showing data
- 14 from the Napa River. For permit reasons, I couldn't
- 15 sample the Napa River.
- 16 In 2017, high densities of Larval Longfin in
- 17 the Napa -- As you can see there on the top left of the
- 18 graph, high densities of Larval Longfin in Petaluma
- 19 River.
- 20 So, although these rivers may be small in
- 21 volume, they may be very important for rearing --
- 22 spawning and rearing habitat as the data shows.
- 23 MS. DES JARDINS: But, Dr. Grimaldo, isn't it
- 24 still an open question of whether the -- the larva that
- 25 are found in those tributaries live to survive?

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1 (Pause in proceedings.)
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- 2 WITNESS GRIMALDO: I would say it's an open
- 3 question on the -- the percentage of larvae that
- 4 survive from anywhere in the estuary, their origin.
- 5 We have an idea of the salinity that they
- 6 survive at, but that doesn't give us a geographic
- 7 region just yet.
- 8 And I am involved peripherally with some
- 9 research where I know that that investigation is going
- 10 on.
- 11 MS. DES JARDINS: Isn't . . . If -- You
- 12 know . . . aren't -- isn't there, you know, a question
- 13 of Otolith research and that question -- and the
- 14 question of whether the larvae that are living in those
- 15 rivers are surviving and spawn as a subject of active
- 16 research?
- 17 WITNESS GRIMALDO: So -- So, yes, there is
- 18 Otolith research going on and providing samples for
- 19 folks to the researches at U.S. Davis to do those
- 20 analyses to determine that -- the natal origin of the
- 21 survivors.
- But there's an outstanding question on the
- 23 survivors from all regions of the estuary, just to be
- 24 clear.
- MS. DES JARDINS: Okay. And then, finally,

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1 I'd like to go to Page 14, at Line 3.
             (Exhibit displayed on screen.)
 2
 3
             MS. DES JARDINS: And you state (reading):
                  "Mr. Baxter also testified that
 5
             Starry Flounder cue in on freshwater to
             move into upstream habitats."
 6
 7
             But you say in your (reading):
             ". . . Review of the peer-review
 8
 9
             literature" you "cannot find any evidence
             that Starry Flounder are using cues to
10
            move into freshwater habitats."
11
12
            WITNESS GRIMALDO: That's correct.
13
             MS. DES JARDINS: Can we bring up Exhibit
   DDJ-321, please.
14
15
             (Exhibit displayed on screen.)
16
            MS. DES JARDINS: And this is from that same
    study. It shows distribution and salinity.
17
18
            And doesn't this show Starry Flounder in
    low-salinity habitats?
19
20
             WITNESS GRIMALDO: This shows Starry Flounder
    in very high salinity, brackish salinity, and
21
    low-salinity habitats. And it -- You can draw no
22
    inference about how those fish got there in terms of
23
24
   use, based on my opinion.
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MS. DES JARDINS: Okay. And -- And so -- So,

25

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1 you know that -- But you do know that they're using the
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- 2 low -- Starry Flounder are using the low-salinity
- 3 habitat. You just don't know how they got there?
- 4 WITNESS GRIMALDO: It is my testimony that
- 5 Starry Flounder are using two-layer gravitational
- 6 circulation to enter the estuary. That's the primary
- 7 mechanism. And that's consistent with what Mr. Baxter
- 8 testified to as well.
- 9 MS. DES JARDINS: Isn't gravitational
- 10 circulation also tied to abundance of phytoplankton in
- 11 the North Bay?
- 12 WITNESS GRIMALDO: I'm not aware of that
- 13 dynamic.
- 14 (Pause in proceedings.)
- MS. DES JARDINS: Can we bring up Exhibit
- 16 DDJ-323, please.
- 17 (Exhibit displayed on screen.)
- 18 MS. DES JARDINS: Are you aware of studies
- 19 done by Jim Cloern of phytoplankton production and
- 20 gravitational circulation?
- 21 WITNESS GRIMALDO: If your question is general
- 22 studies that he's published on phytoplankton
- 23 production, I'm aware of some basic studies that
- 24 he's -- a few studies that he's published.
- MS. DES JARDINS: This isn't one study.

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1
             But if we can scroll down to where it says
    "Abstract."
 2
 3
             (Exhibit displayed on screen.)
             MS. DES JARDINS: It says there (reading):
 5
                  "Phytoplankton populations in the
             northern reach of San Francisco Bay
 6
 7
             apparently are most strongly regulated by
 8
             the physical accumulation of suspended
 9
             particulates by gravitational
             circulation . . . "
10
11
            Do you see that?
12
             WITNESS GRIMALDO: I -- I see that on the
   screen.
13
14
             MS. DES JARDINS: So -- So wouldn't
   phytoplankton then be associated with gravitational
15
16
   circulation?
             WITNESS GRIMALDO: I agree that that is what
17
   this paper concluded. I'm not familiar with this
18
19
   paper.
20
             MS. DES JARDINS: So, you're not familiar
   with -- with James Cloern's work tying gravitational
21
   circulation to phytoplankton production?
22
             WITNESS GRIMALDO: I am not familiar with this
23
24
  paper.
25
            MS. DES JARDINS: Okay. Okay. Thank you.
```

1 That concludes my test -- my questions --

- 2 cross-examination.
- 3 CO-HEARING OFFICER DODUC: Thank you,
- 4 Miss Des Jardins.
- 5 Dr. Grimaldo, assuming that there's no
- 6 redirect.
- 7 MR. MIZELL: That is correct, no redirect.
- 8 CO-HEARING OFFICER DODUC: Thank you for your
- 9 testimony.
- I do have a request of you.
- 11 We spent quite a bit of time discussing
- 12 Page 4, Line 6 through 8, and you did read into the
- 13 record your correction of your description of
- 14 Mr. Baxter's testimony, and then reframed the
- 15 discussion about salvage and how it linked to
- 16 Mr. Bakter -- Baxter's testimony.
- I believe your counsel has access to the rough
- 18 transcript. I'm requesting that you submit an errata
- 19 that reflects the correction that we discussed today in
- 20 the record just so everyone has the corrected version.
- 21 WITNESS GRIMALDO: Yes, I will. Thank you.
- 22 CO-HEARING OFFICER DODUC: And you might as
- 23 well correct the DWR-1322-Errata reference as well.
- 24 WITNESS GRIMALDO: Great. I'll do that, too.
- 25 CO-HEARING OFFICER DODUC: Thank you.

- 1 Appreciate that.
- 2 Mr. Mizell, do you have an estimate of
- 3 cross-examination for Group 7's two witnesses?
- 4 MR. MIZELL: I do.
- 5 My estimate for DWR will be approximately 10
- 6 minutes.
- 7 CO-HEARING OFFICER DODUC: Any other?
- 8 The only e-mail we've received is from
- 9 Grassland with an estimate of 15 minutes.
- 10 MS. MORRIS: I estimate -- Stefanie Morris,
- 11 State Water Contractors -- no more than 10 minutes.
- 12 CO-HEARING OFFICER DODUC: I'm sorry?
- MS. MORRIS: No more than 10 minutes.
- 14 CO-HEARING OFFICER DODUC: 10 minutes.
- 15 Anyone else?
- MS. DES JARDINS: Dierdre Des Jardins, and I
- 17 apologize. I was working on my cross-examination
- 18 questions over lunch.
- 19 I would like to reserve 45 minutes.
- 20 CO-HEARING OFFICER DODUC: 45 minutes.
- 21 All right. So, assuming there's no redirect,
- 22 we will get to Grasslands Water District Mr. Ortega's
- 23 witness. Hopefully, Grassland is watching.
- 24 What is your estimate for cross-examination of
- 25 Mr. Ortega?

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1 MR. MIZELL: DWR requests 20 minutes, please.
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- 2 CO-HEARING OFFICER DODUC: Any other?
- 3 MS. MORRIS: I estimate about 10 minutes.
- 4 CO-HEARING OFFICER DODUC: That means we will
- 5 also get to North Delta Water Agency.
- 6 Cross-examination estimates?
- 7 MR. MIZELL: DWR would request 45 minutes,
- 8 please.
- 9 MS. MORRIS: At this time, about 20 minutes
- 10 for State Water Contractors.
- 11 CO-HEARING OFFICER DODUC: That means it is
- 12 possible we will also get to San Joaquin Tributary
- 13 Authority, Mr. Demko.
- 14 Cross?
- 15 MR. MIZELL: I'm -- DWR might reserve five
- 16 minutes, but I don't believe we'll have much in the way
- 17 of cross.
- 18 CO-HEARING OFFICER DODUC: All right.
- 19 MS. MORRIS: I think no more than 10 minutes.
- 20 I -- Can I ask a clarifying question? Maybe I
- 21 missed it, quite possible.
- 22 Was there ever a ruling based on -- There was
- 23 a ruling and then Mr. O'Laughlin sent a letter, and
- 24 then I thought the Board was going to be making an
- 25 additional ruling on Demko's testimony.

- 1 CO-HEARING OFFICER DODUC: I thought we had
- 2 addressed everything dealing with the San Joaquin
- 3 Tributary Authority.
- 4 MR. DEERINGER: I would suggest that we
- 5 address that tomorrow morning.
- 6 I -- My understanding was that you had
- 7 addressed it all, but there may be additional things
- 8 that need to be buttoned up.
- 9 MS. MORRIS: Okay.
- 10 CO-HEARING OFFICER DODUC: Miss Des Jardins.
- 11 MS. DES JARDINS: I would like -- Excuse me.
- 12 I'd like to reserve 20 minutes both for
- 13 Grasslands and for -- and I apologize for not getting
- 14 up, a little tired at the end of the day -- and for
- 15 San Joaquin Tributaries -- Mr. Demko, San Joaquin
- 16 Tributaries Authority.
- 17 CO-HEARING OFFICER DODUC: Okay. I don't
- 18 think I'll push my luck to LAND tomorrow.
- 19 That should be the plan for tomorrow.
- 20 All right. With that, thank you, everyone.
- 21 Oh, Mr. Mizell.
- MR. MIZELL: Yes.
- 23 With the correction -- With the errata version
- 24 of the testimony for Dr. Grimaldo, would you wish us to
- 25 also red line the limited corrections he made at the

```
1 beginning of his summary, or would you like us to leave
   those as originally submitted?
 2
 3
            CO-HEARING OFFICER DODUC: Let's go ahead and
   make all the corrections.
 5
            MR. MIZELL: Thank you.
 6
            CO-HEARING OFFICER DODUC: Great.
 7
            All right. Thank you all. See you back here
   tomorrow at 9:30.
 8
 9
             (Proceedings adjourned at 5:01 p.m.)
10
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