1	BEFORE THE			
2	CALIFORNIA STATE WATER RESOURCES CONTROL BOARD			
3				
4	CALIFORNIA WATERFIX WATER)			
5	RIGHT CHANGE PETITION) HEARING)			
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 SURREBUTTAL			
14				
15				
16	Wednesday, September 26, 2018			
17	9:30 A.M.			
18				
19	VOLUME 51			
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24	Candace Yount, CSR No. 2737 (p.m. session)			
25	(p.m. bebbion)			

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2	CALIFORNIA WATER RESOURCES BOARD		
3	Division of Water Rights		
4	Board Members Present		
5	Tam Doduc, Co-Hearing Officer: Felicia Marcus, Chair and Co-Hearing Officer:		
6	Dorene D'Adamo, Board Member		
7	Staff Present		
8	Andrew Derringer, Senior Staff Attorney Conny Mitterhofer, Senior Water Resources Control Eng		
9	Jean McCue, Senior Water Resources Control Engr. Hwaseong Jin, Water Resources Control		
10			
11	Assistants:		
12	Thaddeus Hunt Megan Raisis		
13	megan kaisis		
14			
15	PETITIONERS:		
16	For California Department of Water Resources		
17	Tripp Mizell, Senior Attorney		
18	Duane Morris, LLP By: Thomas Martin Berliner, Attorney at Law		
19	By: Jolie-Anne Ansley, Attorney at Law		
20			
21	PROTESTANTS AND OTHER INTERESTED PARTIES:		
22	State Water Contractors		
23	Stefanie Morris, Attorney		
24	Adam Kear, Attorney Becky Sheehan, Attorney		
25	(continued)		

1 APPEARANCES:

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2	PROTESTANTS AND OTHER INTERESTED PARTIES:		
3	Central Delta Water Agency, South Delta Water Agency (Delta Agencies)		
4	Dean Ruiz		
5	San Joaquin County		
6	Thomas Keeling		
7			
8	City of Antioch Matthew Emrick		
9			
10	Local Agencies of the North Delta Osha Meserve		
11			
12	California Sportfishing Protection Alliance, California Water Impact Network, AquAlliance Michael Jackson		
13	Chris Shutes		
14	Sacramento County Regional Sanitation District		
15	Kelley Taber		
16	California Water Research		
17	Deirdre Des Jardins Alexis Krieg		
18	MICALD RITES		
19	Clifton Court, LLP Suzanne Womack		
20	Suzaime womack		
21	County of Contra Costa, Contra Costa Water Agency, and County of Solano		
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1 Thursday, August 2, 2018 9:30 a.m.

- 2 PROCEEDINGS
- 3 ---000---
- 4 CO-HEARING OFFICER DODUC: All right. Good
- 5 morning, everyone. Please take a seat. Welcome back.
- 6 I'm Tam Doduc. To my right is Board Chair and
- 7 Co-Hearing Officer Felicia Marcus. We will be joined
- 8 shortly and will be sitting to the Chair's right is
- 9 Board Member DeeDee D'Adamo.
- To my left are Andrew Deeringer,
- 11 Conny Mitterhofer, and Hwaseong Jin. We are also
- 12 assisted today by Mr. Hunt and Ms. Raisis.
- 13 You all know where you are, so I won't repeat
- 14 that. You all know why we're here; I won't repeat that
- 15 either.
- 16 Three important announcements, since I do see
- 17 a few from -- well, at least one new face. Please take
- 18 a look around, identify the exits closest to you. In
- 19 the event of an emergency, an alarm will sound. We
- 20 will evacuate, taking the stairs, not the elevators,
- 21 down to the first floor and meet up in the park across
- 22 the street. If you're not able to use the stairs,
- 23 please flag down one of the security safety people, and
- 24 they will direct you to a protective area.
- 25 Secondly, this is being recorded and

- 1 Webcasted, so please speak into the microphone when I
- 2 authorize you to do so. And please begin by stating
- 3 your name and affiliation for our wonderful, marvelous
- 4 court reporter, who is back with us today.
- 5 Third, and most importantly, since you have
- 6 been away from me for a while, please take a moment and
- 7 make sure all your noise-making devices are on silent,
- 8 vibrate, "do not disturb."
- 9 All right. There's been a flux of emails, so
- 10 I assume that we will have to begin today with some
- 11 housekeeping matters.
- 12 Mr. Mizell and Mr. Emrick on behalf --
- oh, Ms. Womack is here as well. The flux of e-mails
- 14 that I read at 5:30 this morning -- what a great way to
- 15 begin the day -- was from the two of you regarding the
- 16 proposed change in order with respect to DWR's
- 17 witnesses.
- 18 Do you have anything new to add? Because I
- 19 did read all of your emails starting at 5:30 this
- 20 morning. Is there anything new you wish to add?
- MR. EMRICK: No.
- 22 CO-HEARING OFFICER DODUC: All right. In that
- 23 case, our ruling stands. DWR's two witnesses, thank
- 24 you both for coming today. But we will get to you at a
- 25 later time.

- 1 So let's take a moment now and discuss what
- 2 that later time might be. And that will be based on
- 3 cross-examination anticipated for surrebuttal
- 4 testimony. We will begin today with the County of San
- 5 Joaquin and CSPA presentation, Mr. Kier.
- 6 What is the estimated cross-examination for
- 7 Mr. Kier?
- 8 MS. MORRIS: The Department and the State
- 9 Water Contractors probably have a ten-minute,
- 10 potentially. But we also have -- it's going to depend
- 11 on some rulings and some clarification as to the scope
- 12 of surrebuttal. So I would caveat that with that.
- 13 CO-HEARING OFFICER DODUC: So in other words,
- 14 the ten minutes might be longer?
- MS. MORRIS: Correct.
- 16 CO-HEARING OFFICER DODUC: Any estimate on
- 17 what that longer time frame might be?
- 18 MS. MORRIS: It depends on the rulingon the
- 19 scope.
- 20 CO-HEARING OFFICER DODUC: And that is not a
- 21 bribe to the Hearing Officer, right?
- 22 MS. MORRIS: What's that? No, no. I would
- 23 never do that.
- 24 CO-HEARING OFFICER DODUC: Any other cross for
- 25 Mr. Weir [sic]? Kier, sorry. Kier. That's what

1 happens when you start reading legal arguments at 5:30

- 2 in the morning.
- 3 MS. MESERVE: Good morning, Osha Meserve for
- 4 LAND, and I have 15 minutes of cross.
- 5 CO-HEARING OFFICER DODUC: All right. We will
- 6 then move on to LAND, Mr. Russel Van Loben Sels.
- 7 Estimates of cross?
- 8 MS. MORRIS: Again, on behalf of a joint
- 9 cross-examination by DWR and the State Water
- 10 Contractors, we are anticipating no cross, again,
- 11 depending on the ruling.
- 12 CO-HEARING OFFICER DODUC: Mr. Keeling.
- 13 MR. KEELING: Tom Keeling on behalf of San
- 14 Joaquin County protestants. I anticipate no more than
- 15 ten minutes, quite possibly less.
- 16 CO-HEARING OFFICER DODUC: Ms. Womack.
- 17 MS. WOMACK: Yes, CCLP, probably about ten
- 18 minutes, thank you.
- 19 CO-HEARING OFFICER DODUC: All right. Next up
- 20 then will be Dr. Denton. Estimated cross for
- 21 Dr. Denton?
- MS. MORRIS: This would, again, be a joint
- 23 cross-examination by DWR and the State Water
- 24 Contractors. We estimate approximately 30 minutes.
- 25 CO-HEARING OFFICER DODUC: Anyone else for

- 1 Dr. Denton?
- 2 MS. MESERVE: Osha Meserve for LAND, 15
- 3 minutes.
- 4 MR. JACKSON: Michael Jackson for CSPA, CWIN
- 5 and AquAlliance. No more than 20, likely shorter.
- 6 MR. RUIZ: Good morning. Dean Ruiz for South
- 7 Delta Water Agency parties. I'll reserve 10 to 15, but
- 8 it could be less depending on the earlier cross.
- 9 CO-HEARING OFFICER DODUC: All right. Next
- 10 would be Ms. Des Jardins. Since we did not notify her
- 11 yesterday that we expected her to be here today, I
- 12 don't know if she will. But in the event that her
- 13 witnesses are here today, what is the anticipated cross
- 14 for Dr. Jahn, I believe it was, and Dr. Williams?
- 15 We'll get to them either today or tomorrow. I just
- 16 want an estimate of all the cross up front.
- 17 MS. MORRIS: Okay. Approximately an hour for
- 18 both witnesses.
- MS. MESERVE: Just to clarify, yes,
- 20 Ms. Des Jardins is intending to get her witnesses here
- 21 by noon today. I don't know if that's necessary. I
- 22 guess if it's not, someone could let her know because I
- 23 know they're traveling.
- 24 CO-HEARING OFFICER DODUC: At the rate that
- 25 we're going, I would love to get to her if they are

- 1 here.
- 2 MS. MESERVE: Yeah. Okay. So they should
- 3 keep coming?
- 4 CO-HEARING OFFICER DODUC: Yes.
- 5 MS. MESERVE: Then I would like to reserve 15
- 6 minutes for LAND. Thank you.
- 7 MR. KEELING: San Joaquin County protestants
- 8 reserve 10 minutes. Thank you.
- 9 MR. JACKSON: CSPA, et al. reserves 20 minutes
- 10 and might not use it all.
- 11 MR. RUIZ: SCWA parties, 10 minutes.
- 12 CO-HEARING OFFICER DODUC: All right.
- 13 Estimate for -- let me -- actually, Clifton
- 14 Court in terms of cross, any cross?
- MS. MORRIS: Ten minutes, please.
- MS. MESERVE: Ten minutes for LAND, please.
- 17 CO-HEARING OFFICER DODUC: Save Our Sandhill
- 18 Cranes, estimate of cross for the wonderful
- 19 photographer Mr. Wirth?
- 20 MS. MORRIS: We don't anticipate any
- 21 cross-examination at this time.
- 22 CO-HEARING OFFICER DODUC: Anyone else?
- 23 (No response)
- 24 CO-HEARING OFFICER DODUC: All right.
- 25 Mr. Burke, cross-examination of Mr. Burke?

- 1 MS. MORRIS: We estimate about one hour.
- 2 CO-HEARING OFFICER DODUC: Anyone else for
- 3 Mr. Burke?
- 4 MS. MESERVE: Ten minutes for LAND.
- 5 MR. JACKSON: Ten minutes for CSPA, et al.
- 6 CO-HEARING OFFICER DODUC: And finally,
- 7 Dr. Paulsen, estimate of cross for Dr. Paulsen?
- 8 MS. MORRIS: At this time, we don't estimate
- 9 any cross-examination.
- 10 MS. MESERVE: I will update if it changes, but
- 11 10 minutes for LAND.
- 12 CO-HEARING OFFICER DODUC: Okay.
- 13 All right. Based on that, what I am thinking
- 14 is we'll hopefully -- well, unless something goes awry,
- 15 we will get through with Mr. Kier and then LAND's
- 16 witnesses and Dr. Denton, and we'll get also to
- 17 Ms. Des Jardins, which -- and what I would suggest,
- 18 then, is on Thursday, we take up Sandhill -- Save Our
- 19 Sandhill Cranes, Clifton Court.
- 20 And at this time let me ask, I would like to
- 21 have DWR present their witnesses either on Thursday or
- 22 on Friday. Any thoughts on that?
- MR. MIZELL: I have to check.
- 24 After checking with my witnesses, they can be
- 25 here on Thursday.

1 CO-HEARING OFFICER DODUC: Ms. Meserve, if we

- 2 can get them here on Thursday, then you may all have
- 3 Friday off, and we will return next week with Mr. Burke
- 4 and Dr. Paulsen.
- 5 MS. MESERVE: Well, I do love having the idea
- 6 of the day off. However, I would say that, due to the
- 7 late filing or the scheduled late filing of the DWR
- 8 testimony that we're discussing, I think that I had
- 9 requested in my e-mail of yesterday that it be delayed
- 10 at least until Monday so that we have at least a week
- 11 to review it. So I think that that does short the
- 12 protestants', including Ms. Womack, of time to analyze
- 13 what's in there.
- 14 And I think this falls within a larger concern
- 15 that I have. Since I'm up here right now, I'll just
- 16 state it quickly -- is that the hearing is really
- 17 straying away from what I think would be due process
- 18 for all the participants due to the crunched timing of
- 19 all these witnesses.
- 20 We only -- we were constrained in our
- 21 surrebuttal from the full range of surrebuttal that we
- 22 should have been allowed, given the potential impacts
- 23 of this huge water diversion in the Delta. And then we
- 24 were given only 11 days ultimately, which, you know,
- 25 was a slight extension from the original, which we

1 appreciate but still was not enough time to work with

- 2 experts to respond.
- 3 And then now we've been given only a couple of
- 4 days to review each other's testimony. So it really
- 5 does not allow normal people or even professionals
- 6 adequate time to participate meaningfully in the
- 7 process.
- 8 So I'm very concerned about that as a whole
- 9 with respect to the hearing, but specifically I'm
- 10 speaking to the surrebuttal phase. Thank you.
- 11 CO-HEARING OFFICER DODUC: Since you stated on
- 12 the record, let me respond on the record. Let it be
- 13 very clear that, one, surrebuttal and the topic and the
- 14 issues and the scope of surrebuttal is at the
- 15 discretion of the Hearing Officer based on the request
- 16 that was made to us and also based on the scope of
- 17 rebuttal itself.
- 18 And additionally, in the normal case of a
- 19 water rights hearing, we would be going straight from
- 20 direct to rebuttal to surrebuttal without an 11-day gap
- 21 or the submission of testimony in advance for people to
- 22 review.
- 23 So we actually have made quite a bit of
- 24 accommodation during this hearing for those people who
- 25 are not familiar with our water rights processes and do

- 1 not have experience participating in water rights
- 2 processes. In my opinion, we have gone way above and
- 3 beyond providing due process to everybody involved.
- 4 And on that note, thank you for your comment,
- 5 Ms. Meserve, but that is not going to change our
- 6 current ruling.
- 7 Ms. Womack, do you have anything new to add?
- 8 MS. WOMACK: Just that I would appreciate more
- 9 time because my entire -- my entire what I'm testifying
- 10 about changed completely on the rebuttal phase. And
- 11 I've -- you know, on Monday, I was given a huge amount
- 12 of information to process that I have not processed
- 13 before because I was not -- my --
- 14 CO-HEARING OFFICER DODUC: Ms. Womack, we
- 15 understand all of that. That, again, is nothing new,
- 16 and we have recognized that. We have allowed for
- 17 additional time.
- I would ask, again, is there anything new you
- 19 wish to add?
- 20 MS. WOMACK: I guess when will I get this
- 21 additional time?
- 22 CO-HEARING OFFICER DODUC: You have been given
- 23 additional time. We have another request by
- 24 Ms. Meserve that we will take into account. We will
- 25 let you know later on today.

1 MS. WOMACK: Okay. So tomorrow I will be --

- 2 we will have to cross-examine on what was provided?
- 3 CO-HEARING OFFICER DODUC: I have not said
- 4 that --
- 5 MS. WOMACK: Oh, okay.
- 6 CO-HEARING OFFICER DODUC: -- because
- 7 Mr. Mizell needs to check with his witnesses regarding
- 8 their availability. But we have done our best to try
- 9 to accommodate you, Ms. Womack, in many ways. So,
- 10 please, sit down.
- MS. WOMACK: Thank you.
- 12 CO-HEARING OFFICER DODUC: Mr. Mizell.
- 13 MR. MIZELL: Yes, just to clarify, I had
- 14 checked with the witnesses. They're both sitting right
- 15 here. And they indicated they can be here Thursday.
- 16 CO-HEARING OFFICER DODUC: And what about
- 17 Friday?
- 18 MR. MIZELL: They can also be here Friday.
- 19 CO-HEARING OFFICER DODUC: All right. We will
- 20 take that into account. Are there any other
- 21 housekeeping matters?
- 22 Mr. Jackson. I miss your Friday shirt.
- 23 MR. JACKSON: Yes. I had to borrow this shirt
- 24 because I -- I lost the ability to pack in our break.
- 25 But I do have a question about the fact that

- 1 we're no longer relying on -- or there is no longer a
- 2 need to rely on an administrative draft environmental
- 3 document since the environmental document is out. And
- 4 I was wondering whether or not we were going to
- 5 continue to rely on the administrative draft or whether
- 6 we're going to use a new draft and how that would come
- 7 into the record.
- 8 CO-HEARING OFFICER DODUC: Actually,
- 9 Mr. Jackson we addressed that in a ruling.
- 10 MR. JACKSON: Oh, you did?
- 11 CO-HEARING OFFICER DODUC: Yes, and the
- 12 ruling --
- 13 And you might jump in and help me out here.
- 14 But that because the administrative draft is
- 15 what is in the record, what was the focus of rebuttal,
- 16 surrebuttal will necessarily have to be responsive to
- 17 the administrative draft. I believe the ruling also,
- 18 as I recall it, directed DWR to submit the final when
- 19 it is done.
- 20 And at that time, we will hear from parties as
- 21 to what steps, if necessary, we need to take in order
- 22 to accept that final document -- which would include
- 23 this draft -- into our record for proper consideration.
- 24 Did I miss anything?
- 25 (No response)

- 1 CO-HEARING OFFICER DODUC: All right.
- Ms. Taber.
- 3 MS. TABER: Good morning, Kelley Taber on
- 4 behalf of the City of Stockton.
- 5 This is not a housekeeping matter. It is an
- 6 objection, so I don't know if you'd want to hear that.
- 7 CO-HEARING OFFICER DODUC: Is it an objection
- 8 on an exhibit or a case in chief --
- 9 MS. TABER: It is an objection to an exhibit,
- 10 but the --
- 11 CO-HEARING OFFICER DODUC: Exhibits?
- 12 MS. TABER: It's not offered with any witness
- 13 testimony, so there --
- 14 CO-HEARING OFFICER DODUC: Could you wait
- 15 until that party comes up before making your objection?
- 16 Is it going to negate the party's entire testimony?
- MS. TABER: No. In fact, it's unrelated to
- 18 any testimony that was submitted, that's why --
- 19 CO-HEARING OFFICER DODUC: Let's hear it now.
- 20 MS. TABER: Thank you. I am objecting to the
- 21 Department of Water Resources' submittal on Friday, the
- 22 21st, of data that we produced in response to their
- 23 request on cross-examination of Dr. Susan Paulsen.
- 24 That information was submitted on Friday and
- 25 marked with an exhibit number DWR-1415, but the data is

- 1 not responsive to any of the topics identified in the
- 2 scope of surrebuttal. So it's outside the scope of
- 3 surrebuttal as identified in your September 10th
- 4 ruling.
- 5 And in any event, it would be untimely even if
- 6 it were within the scope of surrebuttal.
- 7 CO-HEARING OFFICER DODUC: Well, let's hear
- 8 from petitioner. But my understanding was that that
- 9 exhibit was not submitted for the purposes of
- 10 surrebuttal.
- 11 But correct me, please, Mr. Mizell or
- 12 Ms. Morris.
- 13 MR. MIZELL: That's right. We submitted the
- 14 exhibit based upon your ruling that Ms. Taber and her
- 15 client produce the information based upon the rebuttal
- 16 testimony.
- 17 CO-HEARING OFFICER DODUC: And
- 18 cross-examination.
- 19 MR. MIZELL: Cross-examination, exactly. So
- 20 this is very parallel to the exact same circumstance we
- 21 went through with Mr. Bezerra and the information that
- 22 was produced by DWR with the cover letter, et cetera.
- 23 So we went through this exercise once before
- 24 that, when information is ordered to be produced by the
- 25 Hearing Officers, it is informative to the record and

- 1 should be submitted with the cover letter so that it
- 2 indicates what it is and is not.
- 3 CO-HEARING OFFICER DODUC: Thank you,
- 4 Mr. Mizell.
- 5 That was my understanding of that submission,
- 6 Ms. Taber.
- 7 MS. TABER: Well, there's -- the DWR has not
- 8 requested surrebuttal or asked to bring Dr. Paulsen in
- 9 for cross-examination upon this evidence. So we would
- 10 be willing to stipulate to what this evidence
- 11 represents.
- 12 Certainly it shows that, had Stockton used
- 13 DWR's chloride conversion factors, it's chloride
- 14 conversion would have been lower. It was a very
- 15 conservative analysis.
- 16 But it's entirely improper to just allow them
- 17 to submit it without any sponsoring testimony
- 18 whatsoever or the opportunity for any of the parties in
- 19 the proceeding to cross-examine Dr. Paulsen on this
- 20 testimony. It's very different than the information
- 21 that was requested by Mr. Bezerra that was -- there was
- 22 an opportunity for cross-examination or witnesses
- 23 available to testify to that.
- But, again, the Department could have
- 25 requested surrebuttal to address those issues that came

- 1 up on cross-examination, and it chose not to.
- 2 CO-HEARING OFFICER DODUC: All right. We'll
- 3 take that under consideration, Ms. Taber.
- 4 Ms. Des Jardins.
- 5 MS. DES JARDINS: Yes. I've been reading the
- 6 continuing education of the Bar material, and it
- 7 indicates that parties should bring to the attention --
- 8 if there is an error in the statement and the hearing
- 9 rulings, they should bring it to the attention of the
- 10 judge or, in this case, the Hearing Officers as soon as
- 11 possible.
- 12 There was -- the hearing ruling on the scope
- 13 of surrebuttal, it contained a misstatement of fact.
- 14 It said that there was no testimony on the public Draft
- 15 EIR. And, in fact, there was testimony on the float
- 16 analysis that was in the public Draft EIR but was not
- 17 in the admin Draft EIR.
- 18 So I wanted to request that that be corrected
- 19 and that -- I had requested surrebuttal on that, but it
- 20 was excluded because of this error. And I'm hoping
- 21 that this can be addressed, perhaps, when the Final
- 22 EIR/EIS is submitted. Thank you.
- 23 CO-HEARING OFFICER DODUC: All right. We'll
- 24 note your --
- 25 Is there a response?

- 1 MS. MORRIS: No.
- 2 CO-HEARING OFFICER DODUC: All right. We'll
- 3 note that as well, Ms. Des Jardins.
- 4 Ms. Morris.
- 5 MS. MORRIS: I hope this is efficient. I
- 6 wanted to ask for clarification regarding scope of
- 7 surrebuttal as it relates to the surrebuttal topics
- 8 outlined as No. 1 in the September 10th ruling, and
- 9 that is with information related to the Supplemental
- 10 EIR/EIS and, in particular, on the footnote Item 1.
- 11 So my -- my understanding when I read this
- 12 ruling in conjunction with the June 18th, 2018 ruling,
- 13 which says that parties may submit evidence that is
- 14 responsive to DWR's EIR Supplement even if that
- 15 evidence touches on matters not directly raised during
- 16 the case in chief of Part 2 -- so rebuttal testimony
- 17 was allowed. And in fact, in that same ruling, the
- 18 Board recognizes that Part 2 of the rebuttal hearing
- 19 was deferred. And this, again, is on June 18th, which
- 20 is just a few days after the Draft Supplemental EIR
- 21 came out.
- 22 So when I read that ruling and then I read the
- 23 September 10th ruling, it says that we've --
- 24 ". . .limited surrebuttal that is responsive to
- 25 significant new information that was first presented

- 1 during the rebuttal Part" -- "phase of Part 2." But
- 2 then the footnote seems to conflict.
- 3 So the way I read this is people already had
- 4 the opportunity to put on rebuttal evidence as to the
- 5 Draft EIR, even though that wasn't raised directly in
- 6 Part 2. But the footnote says that new information is
- 7 either information contained in SWRCB-113 or Part 2
- 8 rebuttal testimony concerning the content.
- 9 So, to me, there is a conflict here because
- 10 there has already been an opportunity to present
- 11 rebuttal information on the Draft EIR/EIS. And so the
- 12 surrebuttal should be properly limited to the scope
- 13 outlined in the September ruling which said it's
- 14 responsive to information that was put on in rebuttal
- 15 or the cross during rebuttal.
- 16 So that will impact how we make motions and
- 17 what we move to strike or not strike.
- 18 CO-HEARING OFFICER DODUC: I think I need more
- 19 coffee to answer that.
- 20 CO-HEARING OFFICER MARCUS: I'll take a look
- 21 at it. I think I understand.
- 22 CO-HEARING OFFICER DODUC: Okay.
- MS. MORRIS: If you have questions, I'm happy
- 24 to answer. It's really a clarification item.
- 25 CO-HEARING OFFICER DODUC: Hold on,

- 1 Ms. Des Jardins. Not yet.
- 2 Do we need to --
- 3 CO-HEARING OFFICER MARCUS: Probably need to
- 4 look at it.
- 5 CO-HEARING OFFICER DODUC: All right.
- 6 Ms. Morris, we will also take that into
- 7 account. We will, after we hear from Ms. Des Jardins,
- 8 take a short break to consider that before we give you
- 9 a response. I recognize that's important for you in
- 10 order to proceed with cross-examination.
- Ms. Des Jardins.
- MS. DES JARDINS: Yes. I would note that
- 13 there was a very compressed schedule --
- 14 CO-HEARING OFFICER DODUC: It has already been
- 15 noted.
- MS. DES JARDINS: -- for looking at the
- 17 information in the Admin Draft Supplemental EIR/EIS.
- 18 And I appreciated the hearing ruling which allowed
- 19 rebuttal on it.
- 20 And particularly, looking at the Supplemental
- 21 Draft EIR/EIS in connection with the Conceptual
- 22 Engineering Report, which was not available, one
- 23 couldn't go back and forth and look between those
- 24 because that wasn't provided before Part 2 Rebuttal.
- 25 So one of my witnesses is testifying about --

- 1 largely about the Conceptual Engineering Report but
- 2 also about issues which -- relating between the
- 3 Conceptual Engineering Report and the Supplemental EIR.
- 4 And it simply was not possible to do that kind of cross
- 5 comparison before. Thank you.
- 6 CO-HEARING OFFICER DODUC: All right. Thank
- 7 you so much for the warm welcome back to this hearing.
- 8 Ms. Meserve.
- 9 MS. MESERVE: Yes, Osha Meserve for LAND. I
- 10 guess I'm not quite sure what counsel for State Water
- 11 Contractors is asking, but if I understand it
- 12 correctly, she is saying that -- only things that were
- 13 new and we should have figured out what those things
- 14 were in the time span between June 21st and when
- 15 surrebuttal schedule began.
- 16 So I just think, back to the importance of
- 17 citizens and professionals and all the participants of
- 18 this hearing being able to participate, I think taking
- 19 a reasonable view of what information was provided in
- 20 the Admin Draft SEIR and the CER that were just
- 21 provided over late this summer, it's essential, and
- 22 that to put the burden on the public to try to figure
- 23 out what might be different between all these different
- 24 documents that DWR keeps throwing at us during the
- 25 course of this hearing and claiming that we should be

- 1 able to figure out those differences without ever being
- 2 provided a red-lined or any kind of analysis is too
- 3 much of a burden.
- 4 So to the extent that State Water Contractors
- 5 are asking for the scope of surrebuttal to be limited
- 6 even further, I would strenuously object.
- 7 CO-HEARING OFFICER DODUC: My understanding,
- 8 Ms. Morris --
- 9 And I'm not taking any more comments, just
- 10 clarification from Ms. Morris if necessary.
- 11 -- is you're asking whether the scope of
- 12 surrebuttal with respect to Issue No. 1 is limited to
- 13 new information presented during rebuttal.
- 14 MS. MORRIS: That's correct. And just to
- 15 further clarify, the CER was submitted as an exhibit.
- 16 So I'm not making any of those comments related to the
- 17 CER; that would be testimony that was submitted in
- 18 rebuttal and would be able to be responded to.
- 19 But my -- my clarification is limited to the
- 20 Draft EIR/EIS.
- 21 CO-HEARING OFFICER DODUC: All right. Thank
- 22 you.
- With that, we will take a short break to
- 24 discuss.
- 25 (Recess taken at 9:57 a.m., returning

- 1 at 10:09 a.m.)
- 2 CO-HEARING OFFICER DODUC: All right. We are
- 3 back. I have four rulings to issue.
- 4 So we'll start first with Ms. Morris's request
- 5 or at least questions for clarification. I will point
- 6 everyone to the September 10th, 2018 ruling. Rebuttal
- 7 was the first opportunity for parties to hear from
- 8 petitioners regarding the contents of the
- 9 Administrative Draft and put that into the context of
- 10 this petition.
- 11 Therefore, as ruled in the September 10, 2018
- 12 ruling, surrebuttal, the scope of surrebuttal includes
- 13 the Administrative Draft. And when we say "new
- 14 information submitted," we meant new information
- 15 submitted since the original Draft -- Final EIR, I
- 16 guess, was submitted and not new information since the
- 17 rebuttal phase.
- 18 And I probably butchered that. So I will look
- 19 to Mr. Deeringer to clarify.
- MR. DEERINGER: Just to reiterate that, the
- 21 reference to "new information" meant changes to the
- 22 project reflected in the Administrative Draft EIR, not
- 23 new information since Part 2 Rebuttal.
- 24 CO-HEARING OFFICER DODUC: Any questions on
- 25 that? Hopefully you guys understood it better than I

- 1 did. "New information" pertains to new information
- 2 since the --
- 3 MS. MORRIS: I think I understand because I
- 4 think it's similar to the rules regarding
- 5 cross-examination on the rebuttal testimony, that it's
- 6 to changes that occurred from the Final EIR to the
- 7 Supplement.
- 8 So not everything in the Supplemental is fair
- 9 game, but for example, let's use a concrete example
- 10 just to explain. If the Final EIR contains a control
- 11 gate structure somewhere and the Supplemental also has
- 12 that control gate structure, it doesn't change anything
- 13 in the operation, then that is not a change from the
- 14 Final EIR to the Supplement.
- But if, for example, the footprint changed in
- 16 the Final to the Supplement, even if that was not
- 17 raised on the rebuttal, that is a change that would be
- 18 allowed for surrebuttal.
- 19 CO-HEARING OFFICER DODUC: Because it was a
- 20 change from the Final EIR.
- MS. MORRIS: Correct.
- 22 MR. DEERINGER: So just to caveat, there may
- 23 be project elements, such as mitigation, that was in
- 24 the Final. But if there are new conclusions expressed
- 25 in the EIR Supplement, such as there is a new impact

- 1 but that impact will be mitigated because of this
- 2 preexisting mitigation requirement, that also is fair
- 3 game.
- 4 So if there are new conclusions about elements
- 5 of the project that were discussed in the FEIR, those
- 6 new conclusions also are fair game. That's what we
- 7 mean by "new information."
- 8 MS. MORRIS: Okay. Then, sorry, one more
- 9 clarification question.
- 10 MR. DEERINGER: Sure.
- MS. MORRIS: For example, even if it changed,
- 12 if the complaint in the testimony is that a particular
- 13 mitigation isn't appropriate or accurate or doesn't
- 14 cover it, if the thrust of the testimony is that the
- 15 mitigation measure is inadequate, that would not be
- 16 new.
- 17 However, the ability to talk about the changes
- 18 from -- a change in the environment from the Final to
- 19 the Supplemental would be fair game.
- 20 CO-HEARING OFFICER MARCUS: I'm worried we're
- 21 trying to parse this way too finely from what's fair.
- 22 And maybe because I -- it's all not direct, so stop me
- 23 if I go too far afield because I don't want to be
- 24 intuiting what's said what's wrong, which is so there's
- 25 what's new, but there's also what's new to -- so you're

- 1 saying -- you're talking about the control gate.
- 2 And if the argument is that somehow Ms. Womack
- 3 should have raised everything about the control gate at
- 4 a time when she thought her whole farm was being taken,
- 5 then maybe we're parsing a little fine for fairness.
- 6 So I'm worried -- I want to understand the
- 7 context of what the question is. Or maybe we should
- 8 just be making the decision based on your specific
- 9 motions to exclude or on scope rather than having this
- 10 hypothetical where everybody -- I'm looking at their
- 11 faces -- everybody in the room is trying to figure out
- 12 what you're saying; maybe that's not what you're
- 13 saying.
- 14 MS. MORRIS: Well, it was the hypothetical. I
- 15 wasn't saying -- I wasn't referring to Ms. Womack's
- 16 property.
- 17 CO-HEARING OFFICER MARCUS: I don't want us to
- 18 make an abstract ruling. I want to do it on the scope.
- 19 MR. DEERINGER: It might be best to wait for
- 20 the concrete objections.
- 21 CO-HEARING OFFICER DODUC: All right. Let's
- 22 do that.
- 23 CO-HEARING OFFICER MARCUS: There is too much
- 24 gaming in this. It's not a contest. It's a search for
- 25 what's the right answer, making sure people's legal

- 1 uses --
- 2 CO-HEARING OFFICER DODUC: No, nope, nope,
- 3 nope.
- 4 CO-HEARING OFFICER MARCUS: I think we're
- 5 wasting time on it.
- 6 CO-HEARING OFFICER DODUC: All right. Let's
- 7 move on. That was Item 1, which I thought was taken
- 8 care of which is now not taken care of.
- 9 Item 2, with respect to Ms. Taber's objection
- 10 to the submission of DWR-1415, I believe it was --
- 11 Correct, Ms. Taber?
- 12 That objection is overruled. Proper
- 13 foundation for that exhibit was laid during
- 14 cross-examination of your witness, Dr. Paulsen. And
- 15 therefore, we will allow that. So at least we will --
- 16 actually, I don't think they moved it yet, right?
- 17 So anyway, your objection is overruled.
- 18 Ms. Des Jardins, your request is also denied,
- 19 objection overruled, however the appropriate phrase is,
- 20 with respect to being allowed to conduct surrebuttal on
- 21 the floating concept, which was in the draft that was
- 22 released.
- 23 As we noticed earlier, the opportunity to make
- 24 suggestions with respect to how to address the Final
- 25 EIR when it is done and when it is submitted by

- 1 petitioners to this process will be made at a later
- 2 time. At that time, you may voice your request for
- 3 further examination of that concept. You may also do
- 4 so in your closing briefs. So there will be
- 5 opportunity for you to weigh in on that. But for now,
- 6 the scope of surrebuttal remains as it was outlined in
- 7 our September 10th ruling.
- 8 And then the final issue was with respect to
- 9 DWR's witnesses. What we will do is schedule you to
- 10 come back on Friday, meaning this Friday, this coming
- 11 Friday. What I would like to do is -- I think we can
- 12 cover a lot of ground today. So if that goes well,
- 13 what we will do is cancel the hearing day for tomorrow
- 14 to allow Ms. Womack additional time to prepare.
- 15 And when we resume on Friday, we will hear
- 16 from DWR's witnesses, and we will get to
- 17 cross-examination by Ms. Womack. All right.
- I think we're finally to you now, Mr. Kier --
- 19 nope, not yet.
- Ms. Meserve.
- 21 MS. MESERVE: Excuse me. I just have a
- 22 clarification question with respect to DWR-1415. It
- 23 was my understanding that cross-exam exhibits were due
- 24 at the conclusion of Part 2 Rebuttal. So I don't
- 25 understand why DWR would be submitting cross-exam

- 1 exhibits on the 21st of September.
- 2 CO-HEARING OFFICER DODUC: This was not their
- 3 cross-examination exhibit. This was an exhibit
- 4 provided by Dr. Paulsen as a result of their
- 5 cross-examination.
- 6 MS. MESERVE: Anyhow, the timing does not seem
- 7 appropriate. And I think the parties would want the
- 8 right to cross-examine Dr. Paulsen about that exhibit.
- 9 We can raise that later, I guess, if we can come up
- 10 with a proposal.
- 11 CO-HEARING OFFICER DODUC: You don't have the
- 12 right to cross-examine a witness based on someone
- 13 else's cross-examination.
- 14 Again, this document was produced -- directed
- 15 by us, I believe -- as a result of cross-examination
- 16 conducted of Dr. Paulsen.
- 17 Anything else?
- 18 (No response)
- 19 CO-HEARING OFFICER DODUC: All right.
- Mr. Berliner?
- I promise we will get to you, Mr. Kier.
- MR. BERLINER: If we were in fact at Mr. Kier,
- 23 then I have a motion. If we're not, I'll hold off.
- 24 CO-HEARING OFFICER DODUC: We are at Mr. Kier.
- 25 Could you hold on while I administer the oath to

- 1 Mr. Kier so that he's official.
- 2 Mr. Kier, if you could please stand and raise
- 3 your right hand.
- 4 (Witness sworn)
- 5 WILLIAM M. KIER,
- 6 called as a Part 2 Surrebuttal witness
- 7 by Protestants County of San Joaquin,
- 8 California Sportfishing Protection
- 9 Alliance, California Water Impact
- 10 Network, and AquAlliance, having been
- first duly sworn, was examined and
- 12 testified as hereinafter set forth:
- 13 CO-HEARING OFFICER DODUC: Thank you.
- Now, Mr. Berliner.
- MR. BERLINER: Yes, thank you very much.
- 16 My motion is to exclude the testimony of
- 17 Mr. Kier on the basis that it is actually just
- 18 argument. There is no new evidence. It is ostensibly
- 19 a rebuttal to certain DWR witnesses, but it's not
- 20 actual rebuttal to those witnesses. It's argument over
- 21 the, let's say, accuracy, if you will, or
- 22 substantiation of their testimony. But it's the same
- 23 kind of argument that you might put in a closing
- 24 argument or in a closing brief. It is not actually any
- 25 new evidence.

1 In fact, the most recent thing cited in the

- 2 entire testimony is the 2010 Flow Criteria Report. All
- 3 of the gentlemen that Mr. Kier is seeking to rebut
- 4 primarily spoke about activities post 2010, which was
- 5 really kind of the point of -- that they were trying to
- 6 make. But Mr. Kier spends no time on anything after
- 7 2010.
- 8 So this is really just argument. It's not
- 9 testimony. I mean, if the nature of testimony is to
- 10 present evidence, there's no evidence. He's just
- 11 arguing about whether they should be -- whether their
- 12 testimony should withstand scrutiny. And that's the
- 13 kind of thing that you typically see in a closing
- 14 brief. Thank you.
- 15 CO-HEARING OFFICER DODUC: Thank you,
- 16 Mr. Berliner.
- 17 Mr. Keeling, Mr. Jackson, your response?
- 18 MR. KEELING: Well, Mr. Kier is responding to
- 19 the testimony of Drs. Hanson, Hutton, and Acuna, who
- 20 basically address the 2010 Flow Report, although they
- 21 said they were rebutting other witnesses. But, as the
- 22 Hearing Officers know, their characterization of all of
- 23 that testimony was just basically a straw man. They
- just wanted to talk about the 2010 Flow Report.
- 25 We have a full --

1 CO-HEARING OFFICER DODUC: Let's talk about

- 2 what your witness is doing rather than revisiting all
- 3 that.
- 4 MR. KEELING: Well, because they were allowed
- 5 to testify, basically, on a free-ranging attack on that
- 6 report as not representing the best science, we brought
- 7 in an expert to talk about what that report is and
- 8 about the sources underlying that report. That's why
- 9 there are about 100- -- I want to say 175 exhibits, all
- 10 of which were referenced at Pages 137 through 151 of
- 11 that report as being the basis that this Board relied
- on which, interestingly enough, were not in evidence
- 13 even though the report itself was.
- 14 So we ended up with a situation where, well,
- 15 the report's in evidence; that's enough for anybody to
- 16 talk about it; that's why they were allowed to talk.
- 17 But none of the basis for the report was in evidence,
- 18 which was cited by the Board itself in the report --
- 19 CO-HEARING OFFICER DODUC: Are you arguing,
- 20 Mr. Keeling, then, that is the new evidence which
- 21 Mr. Kier is bringing into this record?
- 22 MR. KEELING: It's new to this proceeding;
- 23 it's not new to the 2010 proceeding.
- 24 CO-HEARING OFFICER DODUC: Understand.
- 25 Mr. Jackson, anything to add?

1 MR. JACKSON: Well, in terms of fundamental

- 2 fairness, which we've been talking about, the
- 3 testimonies of Dr. Hanson and Dr. Hutton in particular
- 4 on cross was that they hadn't reviewed the -- the
- 5 environmental document, they hadn't -- they had not
- 6 directed their attention in their testimony to the
- 7 WaterFix in any way but that what they were doing was
- 8 pointing out that there was new information after the
- 9 2010 report.
- 10 Our position is -- and as outlined in the
- 11 testimony is it -- it's new only in time. All of those
- 12 subjects were dealt with extensively in the 2010
- 13 hearing, but the evidence of that had to be submitted.
- So we brought forward a witness who had
- 15 testified in that hearing and, actually, every hearing
- 16 from the time the State Board was established to
- 17 indicate that it was just new studies on the same
- 18 issues. And if that was the only thing in the record,
- 19 it was going to be a major problem.
- 20 So when we were overruled to keep that
- 21 testimony out -- remember there were motions made to
- 22 keep that testimony out on precisely the same grounds.
- 23 CO-HEARING OFFICER DODUC: How can I forget,
- 24 Mr. Jackson.
- 25 MR. JACKSON: That they're now arguing that we

1 can't respond to it by putting in the evidence from the

- 2 2010 report and by having someone testify to the fact
- 3 that these issues are not new, the uncertainty is not
- 4 enough to stop. We need to make a decision. And if
- 5 other boards had done it in the past, it would have
- 6 been -- we might not have been in such a situation.
- 7 CO-HEARING OFFICER DODUC: Thank you,
- 8 Mr. Jackson.
- 9 Mr. Keeling, any additions?
- 10 Mr. Berliner.
- 11 MR. BERLINER: Yes. I was not going to raise
- 12 this issue at this time, but because both Mr. Keeling
- 13 Mr. Jackson have raised it, now I feel compelled to
- 14 raise it.
- 15 It appears to me, at least, that the primary
- 16 reason for Mr. Kier testifying today is to get these
- 17 over 100 documents that they're trying to get into
- 18 evidence into evidence. In the vernacular that lawyers
- 19 use, this is a data dump. They could have gotten these
- 20 documents in with appropriate witnesses a long time
- 21 ago.
- Now they come at the very last minute with
- 23 well over a hundred documents that they're trying to
- 24 get in that Mr. Kier doesn't even refer to. His
- 25 testimony does not rely on these documents. He doesn't

- 1 cite them; he doesn't discuss them; he doesn't compare
- 2 how studies done, let's say, in 19- -- or let's say
- 3 2008 would rebut something that some other witness has.
- 4 Basically, the point he makes is, well, we
- 5 knew everything we needed to know by the 2010 Flow
- 6 Report and anything that's happened since then just
- 7 furthers the same concepts that were already accepted
- 8 in the 2010 Flow Report. But that's as far as he goes.
- 9 And there -- we don't need testimony for that
- 10 from Mr. Kier. We've had testimony from witness who
- 11 are trying to present proper rebuttal testimony
- 12 regarding the various issues that have been raised.
- So to come in and try to dump well over a
- 14 hundred documents -- we have no idea why those
- 15 documents are being submitted. They are thousands and
- 16 thousands of pages without any reference; we have no
- 17 opportunity to cross-examine the folks that prepared
- 18 those documents. And these are not all necessarily --
- 19 let's call them official studies, if you will. A lot
- 20 of these are comment letters and a variety of other
- 21 things that are coming in.
- This would be thrown out and should be thrown
- 23 out here. I mean, I can't imagine why you would allow
- 24 someone to come in with literally hundreds of documents
- 25 without any reference to them.

1 CO-HEARING OFFICER DODUC: All right. Did you

- wish to add something Ms. Sheehan?
- 3 MS. SHEEHAN: I just would like to join the
- 4 objection and particularly on the point of that the
- 5 witness did not explain how any of the studies he's
- 6 trying to get in support his arguments.
- 7 And so there's thousands of pages, and we just
- 8 have no way of knowing what's in those pages he's
- 9 relying on. So it's impossible to know even what we
- 10 should ask him as a part of cross because -- no way of
- 11 knowing what he thought was important in those
- 12 thousands of pages and that's actually a part of his
- 13 testimony.
- 14 CO-HEARING OFFICER DODUC: All right.
- Ms. Meserve -- if you don't mind pulling the
- 16 microphone up, thank you. It pains my back to watch
- 17 other people bending over it.
- MS. MESERVE: I'm not that tall, but, yes.
- 19 So, yeah. I mean, I believe this testimony is
- 20 directly responsive to testimony that the Hearing
- 21 Officers allowed in over strenuous objections of a DWR
- 22 late hit on the flow report, which was always relevant
- 23 in this proceeding, which was always at issue and that
- 24 it's only because of -- I mean, at this juncture, in
- 25 fairness, we needed -- or these parties have, you know,

- 1 put forward a response to that.
- 2 And the documentation supporting the 2010 Flow
- 3 Report is not unknown to any of us; it just wasn't part
- 4 of this record. And they're not surprise exhibits, and
- 5 they're not picked out of nowhere.
- 6 Those were the exhibits that this Board relied
- 7 on in creating that 2010 Flow Report, which was
- 8 identified at the beginning of this hearing process as
- 9 being relevant to the hearing issues.
- 10 So -- and we've also been over the ground
- 11 before of that test- -- exhibits don't even need
- 12 supporting testimony. They don't need to be
- 13 referenced. Here, those exhibits are -- you know,
- 14 clearly the reason for their submittal with the Kier
- 15 testimony, I think, has been articulated in the
- 16 testimony itself and by counsel for San Joaquin and
- 17 CSPA.
- 18 So this is part of completing the record.
- 19 It's in response to what DWR submitted, and it should
- 20 be allowed.
- 21 CO-HEARING OFFICER DODUC: Please note,
- 22 Mr. Keeling, that was a very good response.
- Do you wish to add to it?
- 24 MS. DES JARDINS: I would just like to note
- 25 that --

- 1 CO-HEARING OFFICER DODUC: Oh, apparently not.
- 2 MS. DES JARDINS: This is Deirdre Des Jardins,
- 3 California Water Research.
- I would just like to note that I did object to
- 5 some of the testimony and exhibits of Mr. Acuna as not
- 6 being responsive to rebuttal. And there were a very
- 7 large number of studies, some of which only had, like,
- 8 the most glancing reference in Mr. Acuna's testimony.
- 9 And to allow such a broad ranging submission
- 10 of new studies -- and, again, Mr. Acuna didn't --
- 11 didn't point out specific things in these new studies
- 12 he was referencing.
- 13 I think there should be a similar breadth
- 14 given to surrebuttal, since that was the scope of
- 15 rebuttal and it did allow a very large amount of new
- 16 information in about current conditions in the Delta.
- 17 CO-HEARING OFFICER DODUC: Thank you all.
- 18 For the reasons articulated by Ms. Meserve,
- 19 the objection is overruled.
- 20 Mr. Kier. Mr. Keeling or Mr. Jackson, would
- 21 one of you like to start?
- MR. KEELING: Thank you.
- 23 DIRECT EXAMINATION BY MR. KEELING
- MR. KEELING: Mr. Kier, is Exhibit SJC-363 a
- 25 true and correct copy of your statement of

- 1 qualifications?
- 2 WITNESS KIER: Yes.
- 3 MR. KEELING: And is Exhibit SJC-364 a true
- 4 and correct copy of your written testimony?
- 5 WITNESS KIER: Yes.
- 6 MR. KEELING: Could you please summarize the
- 7 high points of your testimony before the Hearing
- 8 Officers.
- 9 WITNESS KIER: Right. The main points of my
- 10 written testimony are --
- 11 CO-HEARING OFFICER DODUC: Mr. Kier, if you
- 12 could pull the microphone closer to you.
- 13 WITNESS KIER: Okay. Is this good?
- 14 CO-HEARING OFFICER DODUC: Yes.
- 15 WITNESS KIER: Okay. Main points of my
- 16 written testimony are simply this. I participated in
- 17 your Board's 2010 Delta Flow Criteria proceedings.
- 18 They were, in my view, the most comprehensive and
- 19 deliberate discussion of the protection of in-stream
- 20 public trust resources of the San Francisco Bay-Delta
- 21 Estuary that I have ever witnessed in my 60 years of
- 22 studying Bay-Delta conservation matters.
- 23 The expert panel that the Board retained --
- 24 Dr. Bennett, Dr. Herbold, Dr. Lund, Dr. Kimmerer,
- 25 Dr. Moyle and the others -- are all top-flight Delta

- 1 ecosystem experts.
- 2 I've submitted as exhibits in this proceeding
- 3 many of the key exhibits from the 2010 proceedings upon
- 4 which your Board relied for its finding.
- 5 I have testified in several San Francisco
- 6 Bay-Delta Estuary water quality and water rights
- 7 proceedings in the past. I explain in my testimony
- 8 how, in such proceedings, the Water Project proponents
- 9 inevitably come in at the end of the proceedings with
- 10 what they say is new evidence that overrides the
- 11 substantive testimonies concerning Delta freshwater
- 12 through-flow and protection of public trust resources,
- 13 like salmon -- which is my particular concern --
- 14 presented by the responsible fishery agencies and
- 15 others.
- 16 I've read the Water Project experts' rebuttal
- 17 testimonies. They look pretty much like the late and
- 18 the preceding testimonies that I've seen brought in by
- 19 the Water Projects and the Contractors for more than 30
- 20 years.
- 21 They say, in effect, "Disregard the science
- 22 that has been presented to you because we have new
- 23 science that negates what you have been presented
- 24 with."
- 25 The Hanson testimony argues that -- argues

- 1 that the 2010 Delta Flow Criteria Report, Phase 2
- 2 Technical Basis Report, which was based on substantial
- 3 Bay-Delta Estuary science, should be accorded less
- 4 weight because some post-2010 findings, based on much
- 5 sketchier data, challenges the Delta freshwater
- 6 through-flow needs identified in those 2010
- 7 proceedings.
- 8 Dr. Hanson made the same arguments at the 2010
- 9 proceedings. And the Board found his arguments
- 10 unconvincing then, and they strike me as unconvincing
- 11 now.
- 12 The Hutton testimony argues that drawing
- 13 conclusions about Delta freshwater through-flow and
- 14 ecosystem relationships in the estuary is questionable
- 15 because we don't have enough pre-1960 information and
- 16 that things have changed since then. But he's right;
- 17 things have changed since the '60s when the State Water
- 18 Project came online.
- 19 But that doesn't mean that we throw up our
- 20 hands and say there's no way that this Board can
- 21 establish flow standards for protecting the estuary's
- 22 public trust resources. The Board is mandated to
- 23 protect the estuary's public trust resources, and the
- 24 2010 Delta Flow Criteria provided a solid information
- 25 base for doing just that.

- 1 The Acuna testimony says our simplistic
- 2 understanding of Delta smelt is more nuanced than what
- 3 was presented in the 2008 conceptual models. Well, the
- 4 Department of Fish and Wildlife's 1970s midwater trawl
- 5 index for Delta smelt averaged a thousand, a thousand.
- 6 This index is now single digits, a decline of three
- 7 orders of magnitude. There's not a lot of nuance
- 8 there. It's difficult to adjust models with a sample
- 9 size close to zero.
- 10 I would recommend that you apply your 2010
- 11 Delta Flow Criteria to the development of appropriate
- 12 flow crit- -- I'm sorry, yeah, to appropriate flow
- 13 criteria as directed by the legislature to any order
- 14 including a change in the point of diversion of the
- 15 State Water Project or the Central Valley Project.
- 16 The new freshwater flow criteria should extend
- 17 from the North Delta -- Freeport, say -- through the
- 18 Bay-Delta Estuary. Thank you.
- 19 CO-HEARING OFFICER DODUC: Thank you,
- 20 Mr. Kier.
- 21 Does that conclude your direct, Mr. Keeling,
- 22 Mr. Jackson?
- MR. KEELING: Yes.
- 24 CO-HEARING OFFICER DODUC: All right.
- 25 Mr. Mizell, Ms. Morris?

- 1 Mr. Berliner, the name I didn't call.
- 2 MR. BERLINER: We're just trying to keep
- 3 things mixed up a little bit.
- 4 CO-HEARING OFFICER DODUC: So does the
- 5 ten-minute estimate still hold, or has your cross now
- 6 expanded?
- 7 MR. BERLINER: Ten minutes will hold.
- 8 CO-HEARING OFFICER DODUC: All right.
- 9 CROSS-EXAMINATION BY MR. BERLINER
- 10 MR. BERLINER: Good morning, Mr. Kier, my name
- 11 is Tom Berliner, and I'm an attorney for the Department
- 12 of Water Resources.
- 13 Mr. Kier, your testimony, if I understand it,
- 14 is devoid of any discussion of fishery studies
- 15 post-2010, correct?
- 16 WITNESS KIER: Void of any -- no, it's not --
- 17 it addresses Mr. -- Dr. Hanson's testimony, which had
- 18 to do with flow studies post-2010, if I understood your
- 19 question correctly.
- 20 MR. BERLINER: You are challenging
- 21 Dr. Hanson's testimony, correct?
- 22 WITNESS KIER: Correct. Pardon me. I'm
- 23 challenging his main point, which is that science
- 24 conducted since 2010 somehow negates the science
- 25 that's -- was captured in the 2010 flow proceedings and

- 1 report.
- 2 MR. BERLINER: I take it that's what you
- 3 understand the point of Dr. Hanson's testimony is, to
- 4 say that what happened prior to 2010 has all been
- 5 negated?
- 6 WITNESS KIER: Basically. He argues that more
- 7 science is needed. And as a person who's been involved
- 8 with Bay-Delta science for 60 years, I couldn't argue
- 9 with the need for additional science.
- 10 But there is a huge body of science that was
- 11 captured in the 2010 proceedings. And I am addressing
- 12 in my testimony Dr. Hanson's effort to negate the value
- of the 20108 flow report.
- 14 MR. BERLINER: Didn't Dr. Hanson's testimony
- 15 say that the science is more nuanced today than it was
- 16 in 2010?
- 17 WITNESS KIER: Each of the Water Project
- 18 rebuttal people said that -- made that point, that
- 19 science more nuanced.
- 20 MR. BERLINER: Are you aware of anybody else
- 21 that's made that point?
- 22 WITNESS KIER: No, I was primarily concerned
- 23 with these three testimonies.
- MR. BERLINER: Are you familiar with
- 25 Andrew Jahn?

- 1 WITNESS KIER: Yes, I am.
- 2 MR. BERLINER: Did you have a chance to review
- 3 his testimony in this proceeding?
- 4 WITNESS KIER: I have. I kind of fanned
- 5 through it, but I didn't really absorb it.
- 6 MR. BERLINER: You're not capable then, as you
- 7 sit here today, of observing that Mr. Jahn also makes a
- 8 point that our knowledge of science is more nuanced
- 9 today than it was in 2010?
- 10 WITNESS KIER: I'm sorry. Your question is?
- 11 MR. BERLINER: As you sit here today, you're
- 12 not sufficiently familiar with Mr. Jahn's testimony to
- 13 appreciate that he was making the comment similar to
- 14 Mr. Hanson, that science is more nuanced today than it
- 15 was in 2010?
- 16 WITNESS KIER: I think you should put that
- 17 question to Dr. Jahn.
- 18 MR. BERLINER: Well, I was just trying to get
- 19 your understanding, sir.
- 20 WITNESS KIER: I think I -- I thought I
- 21 explained myself, that I have looked hurriedly. I
- 22 mean, these documents just arrived, and there was only
- 23 so much time.
- 24 CO-HEARING OFFICER DODUC: Understood.
- 25 MR. BERLINER: Okay. Thank you. That's fine.

1 MS. DES JARDINS: And I would like to lodge an

- 2 objection that Mr. Berliner's statement
- 3 mischaracterizes Dr. Jahn's testimony.
- 4 CO-HEARING OFFICER DODUC: So noted.
- 5 MR. BERLINER: Thank you.
- 6 Mr. Kier, you relied heavily on the work of
- 7 Dr. Marty Kjelson, correct?
- 8 WITNESS KIER: Right. I still think that's
- 9 solid work.
- 10 MR. BERLINER: And Dr. Kjelson's work was done
- 11 pre-1989, correct, the studies that he relied on?
- 12 WITNESS KIER: Work was done and the work was
- 13 reported into the Board's 1987 proceedings, Bay-Delta
- 14 Water Quality proceedings.
- MR. BERLINER: And do you recall that
- 16 Dr. Kjelson was relying on data from the late 1960s
- 17 into about the mid 1980s? Does that sound about right?
- 18 WITNESS KIER: Sounds about right. There were
- 19 a lot of years of work.
- 20 And I might add, Mr. Berliner, that I think
- 21 it's -- that that was clearly the most substantive
- 22 assessment of the relationship between Bay-Delta
- 23 freshwater through-flow and salmon survival.
- MR. BERLINER: And are you aware that
- 25 Dr. Kjelson's work had been the subject of some

- 1 criticism?
- 2 WITNESS KIER: Well, everybody's work is the
- 3 subject of some criticism.
- 4 MR. BERLINER: Well, are you familiar with the
- 5 criticism that is in the record related to the current
- 6 Water Quality Control Plan Substantive Environmental
- 7 Phase 1 proceeding?
- 8 MR. JACKSON: Objection, that's -- if we get
- 9 into the Phase 1 proceeding, we are well beyond the
- 10 scope of any surrebuttal testimony.
- 11 CO-HEARING OFFICER DODUC: Mr. Berliner?
- MR. BERLINER: I'm not getting into the Phase
- 13 1 proceeding. I'm directing myself to a study that was
- 14 requested by the Water Board that was submitted into
- 15 the Phase 1 record and is directly critical of some
- 16 work by Dr. Kjelson that I'm referring to.
- 17 CO-HEARING OFFICER DODUC: And is that same
- 18 work cited by Mr. Kier in his testimony, the work that
- 19 is being criticized?
- 20 MR. BERLINER: Yes. Dr. Kjelson's work is
- 21 being criticized by Mr. Thomas Quinn or Dr. Thomas
- 22 Quinn in the Board's own document. And I intend to put
- 23 that up as an exhibit.
- 24 CO-HEARING OFFICER DODUC: All right.
- 25 Overruled for now.

1 You may bring it up again, Mr. Jackson, should

- 2 this stray far off course.
- MR. BERLINER: We have that document on a
- 4 thumb drive.
- 5 CO-HEARING OFFICER DODUC: And, Mr. Kier, when
- 6 you see this document, please let us know whether or
- 7 not you are familiar with it and are able to answer
- 8 questions about it.
- 9 MR. BERLINER: Mr. Hunt, when you open the
- 10 document, if you could please go to pdf Page 250.
- 11 CO-HEARING OFFICER DODUC: And hold on.
- 12 Before you do that, let's identify the document and ask
- 13 Mr. Kier if he's familiar with it.
- MR. BERLINER: Yes, this has been marked as
- 15 DWR-1425, Appendix C, Technical Report for the
- 16 Scientific Basis for Alternative San Joaquin River Flow
- 17 and Southern Delta Salinity Objectives.
- 18 And the part that I am referring to
- 19 specifically are comments submitted by Thomas Quinn
- 20 that start on approximately PDF Page 238. And I'm
- 21 referring to Page 12 of his review, which is on PDF
- 22 Page 250.
- 23 CO-HEARING OFFICER DODUC: Mr. Kier, what is
- 24 familiarity with this document?
- 25 WITNESS KIER: I'm sorry. What's your

- 1 question?
- 2 CO-HEARING OFFICER DODUC: How familiar are
- 3 you with this?
- 4 WITNESS KIER: No, I'm not familiar with the
- 5 paper. And, you know, I'm trying to figure out what
- 6 the question -- what the issue is here.
- 7 MR. BERLINER: Well, what I was going to ask
- 8 you --
- 9 If we could pull that page up, Mr. Hunt.
- 10 -- is to take a look at the top of the page,
- 11 which --
- We're getting some shadow on the screen on the
- 13 left which is closest to the witness. I'm wondering if
- 14 there might be something that's blocking --
- Mr. Kier, I'm going to suggest that you try to
- 16 take a look at the right-hand screen or I could hand
- 17 you my iPad and you could read it right where you are.
- 18 I think the left screen is a little too difficult.
- 19 Maybe you can make it out.
- 20 WITNESS KIER: Why don't you just read it to
- 21 me.
- MR. BERLINER: Well, I'd rather not read that
- 23 much into the text. It's not been our practice --
- 24 CO-HEARING OFFICER DODUC: Hold on.
- 25 MR. BERLINER: -- but with the Hearing

- 1 Officer's indulgence --
- 2 CO-HEARING OFFICER DODUC: No.
- 3 Mr. Kier, that monitor should have -- if you
- 4 would mind taking a look at it from that monitor.
- 5 MR. KEELING: Now they've fixed it.
- 6 CO-HEARING OFFICER DODUC: It might be easier
- 7 from the monitor anyway. Oh.
- 8 MR. JACKSON: I have an objection that's
- 9 different than was entered before.
- Now that I've looked at this, this is a
- 11 paragraph that talks essentially about Vernalis flows.
- 12 And as I understand it, the question of the Vernalis
- 13 flows has been pretty much ruled out of this hearing.
- 14 CO-HEARING OFFICER DODUC: That is a point.
- Mr. Berliner, your response.
- MR. BERLINER: This talks about salmon
- 17 survival at out-migration in the April-through-June
- 18 period through the Delta of the -- and the correlation
- 19 of flows at Vernalis. This is not a discussion of San
- 20 Joaquin River flows in that context. This has to do
- 21 with salmon survival through the Delta.
- 22 CO-HEARING OFFICER DODUC: Ms. Sheehan.
- MS. SHEEHAN: This is -- so this is the
- 24 discussion of the paper that the witness is relying
- 25 heavily on in his testimony. And this paper deals with

1 flows at Vernalis. This is talking about the analysis

- 2 that is in the paper he's relying on.
- If it's not relevant to these proceedings,
- 4 well, then, that's something to be weighing later. But
- 5 this is relating to the study that he's specifically
- 6 citing and discussing and relying on.
- 7 CO-HEARING OFFICER DODUC: Okay.
- 8 Ms. Des Jardins.
- 9 MS. DES JARDINS: The scope of Chuck Hanson's
- 10 testimony was limited to Sacramento River flows and
- 11 Sacramento River migration, migration of salmon from
- 12 the Sacramento River through the Delta.
- 13 Mr. Hanson also -- to the extent that it's
- 14 expanded now on surrebuttal to questioning to address
- 15 migration of San Joaquin River salmon past the Delta
- 16 pumps, all parties should be allowed to explore that.
- 17 It was -- Hanson specifically rebutted the parts of the
- 18 2010 Delta Flow Criteria Report having to do with San
- 19 Joaquin River -- with Sacramento River salmon and --
- 20 and the 2010 Delta Flow Criteria Report recommendations
- 21 for Sacramento River flows and limits on the export
- 22 pumps to protect Sacramento River salmon.
- 23 So this would be a considerable expansion of
- 24 previous scope.
- 25 CO-HEARING OFFICER DODUC: And hold on. I

- 1 have a question now for Mr. Berliner.
- 2 Mr. Berliner, this cites a study in 1984 --
- 3 I'm sorry, 1989, but Mr. Kier's testimony refers to the
- 4 earlier study.
- 5 MR. BERLINER: He refers to the 1989 study.
- 6 CO-HEARING OFFICER DODUC: No, he refers to
- 7 the 1987 Bay-Delta hearing; therefore, it could not
- 8 include a 1989 study.
- 9 MR. JACKSON: In any event, Mr. Kier's not
- 10 familiar with this paper. And the fact that it's a
- 11 different study than the one that he quotes and that it
- 12 is dealing with a subject that -- the heading of this
- 13 paper is about the San Joaquin River flows, and it's
- 14 about the San Joaquin River fish, which is not the same
- 15 report that he's cited.
- 16 CO-HEARING OFFICER DODUC: Mr. Berliner, I
- 17 would to have agree, unless you can point me to where
- 18 in Mr. Kier's testimony this is specific to. All I'm
- 19 seeing is Sacramento River and references to a 1987
- 20 Bay-Delta hearing.
- MR. BERLINER: We're just pulling up an
- 22 exhibit.
- Sorry, we're having a little computer
- 24 difficulty here.
- 25 We're trying to pull up a PCFFA exhibit from

- 1 earlier in the proceeding.
- 2 CO-HEARING OFFICER DODUC: And would that be
- 3 PCFFA-149?
- 4 MR. BERLINER: Yes, it would.
- 5 CO-HEARING OFFICER DODUC: Could we pull that
- 6 up, please, Mr. Hunt, because Mr. Kier did reference
- 7 that in his testimony.
- 8 PCFFA-149.
- 9 MR. BERLINER: All right. In the interests of
- 10 moving on, I don't have any further questions for
- 11 Mr. Kier.
- 12 CO-HEARING OFFICER DODUC: All right. Thank
- 13 you, Mr. Berliner.
- Ms. Meserve, do you still wish to cross?
- 15 CROSS-EXAMINATION BY MS. MESERVE
- 16 MS. MESERVE: One moment while I get my papers
- 17 in order. I think I'm going to need the SWRCB-25
- 18 exhibit, which is the 2010 Flow Report, if we could get
- 19 that up on the screen, please.
- 20 And I just have a few questions following up
- 21 on your --
- 22 Osha Meserve for Local Agencies of the North
- 23 Delta. And I just have a few questions regarding your
- 24 endorsement of the flow recommendations from the 2010
- 25 report for consideration by this Board in processing

- 1 this petition.
- 2 And I'm specifically looking at Page 15 of
- 3 your testimony -- and I think elsewhere, but on Page
- 4 15, on Lines 13 and 14, you ask this Board to apply the
- 5 work of the 2010 Flow Report including the
- 6 recommendations. And so if we could look at those
- 7 recommendations, which are on Page 5 of SWRCB-25.
- 8 And in looking at those recommendations, are
- 9 you aware, Mr. Kier -- try to get everyone in there,
- 10 right.
- 11 Are you aware of what fish those flow
- 12 recommendations were developed around?
- 13 WITNESS KIER: In part, my testimony and the
- 14 testimony of others and the work of the expert
- 15 technical panel that the Board retained.
- 16 MS. MESERVE: Could we scroll to Page 8 of the
- 17 same document, which is the Flow Criteria Report.
- 18 CO-HEARING OFFICER DODUC: Ms. Meserve, did he
- 19 answer your question? Were you asking about a fish
- 20 species?
- 21 MS. MESERVE: Yes, yes. Sorry. That's why I
- 22 should have got the exhibit up correctly.
- 23 If you see here, Mr. Kier, there's a bulleted
- 24 list of fish that were considered in developing those
- 25 criteria.

1 And my question is do you believe there are

- 2 other fish in the Delta that ought to be also protected
- 3 with flows other than these fish that are listed in the
- 4 report?
- 5 CO-HEARING OFFICER DODUC: Hold on, please.
- 6 Mr. Mizell.
- 7 MR. MIZELL: Yeah, we object as going beyond
- 8 the scope of his surrebuttal. In his surrebuttal, he
- 9 indicates that you should apply the 2010 Delta Criteria
- 10 Report. He does not elaborate further upon that to
- 11 explain what additional species should also be
- 12 protected. So I believe it's beyond the scope.
- 13 CO-HEARING OFFICER DODUC: Answer, Ms.
- 14 Meserve?
- MS. MESERVE: I believe I'm just trying to
- 16 understand what his recommendations are and how far
- 17 they go and whether he, himself, considered other fish
- 18 in making the recommendation that the flow report be
- 19 considered and incorporated into the decision here.
- 20 CO-HEARING OFFICER DODUC: Let's ask the
- 21 question this way, Mr. Kier.
- 22 In your testimony during the 2010 Flow
- 23 Criteria hearing, to which you've mentioned in your
- 24 testimony, did you have the chance to consider other
- 25 fish other than what is listed here?

- 1 WITNESS KIER: My testimony concerned
- 2 Sacramento River fall-run Chinook salmon, which is the
- 3 backbone of the fishery, as you know. And so I was
- 4 salmon-centric in my testimony in 2010.
- 5 MS. MESERVE: And so that would include the
- 6 fall-run salmon is not listed today as endangered or
- 7 threatened, correct?
- 8 WITNESS KIER: Right.
- 9 MS. MESERVE: But do you believe that that
- 10 species should also be protected by flows in this
- 11 proceeding?
- 12 WITNESS KIER: I'm sorry. Would you put the
- 13 question again?
- 14 CO-HEARING OFFICER DODUC: Ms. Sheehan.
- MS. SHEEHAN: I would object to this being
- 16 outside of scope. He didn't discuss whether other fish
- 17 should be included or the scope of what the State Board
- 18 should have been considering in 2010. This isn't in
- 19 his testimony.
- 20 MS. MESERVE: He's recommending that the
- 21 criteria be applied, so I'm trying to understand, when
- 22 he says "the criteria." And then following up on the
- 23 Hearing Officer's questions, he identified the salmon,
- 24 and so I was just following up on that.
- 25 CO-HEARING OFFICER DODUC: I'm sustaining

- 1 Ms. Sheehan's objection.
- 2 MS. MESERVE: Okay. If we could -- so I'm not
- 3 allowed to ask about the fish on this list; is that
- 4 what you're saying?
- 5 CO-HEARING OFFICER DODUC: No. Ask about the
- 6 fish on the list.
- 7 MS. MESERVE: Oh, because you said you were
- 8 sustaining the objection.
- 9 CO-HEARING OFFICER DODUC: Because you were
- 10 asking beyond what's on the list.
- MS. MESERVE: Okay. So with respect to the
- 12 salmon --
- 13 MR. JACKSON: For point of clarification,
- 14 Chinook salmon were considered, and it says "various
- 15 runs." And as somebody who was there, I know that they
- 16 talked about the commercial fish as well.
- 17 CO-HEARING OFFICER DODUC: I understood that.
- 18 I thought Ms. Meserve was asking Mr. Kier -- and I
- 19 think this is what Ms. Sheehan was objecting to --
- 20 about other fisheries -- other species that's not
- 21 covered on this list that he thought should be
- 22 protected.
- 23 If I misunderstood the question, then that's a
- 24 different matter.
- MS. MESERVE: Okay. Well, yeah, I was trying

- 1 to follow what was the guidance. So, yes, what I want
- 2 to ask about is fall-run Chinook salmon.
- 3 CO-HEARING OFFICER DODUC: Which is on the
- 4 list.
- 5 MS. MESERVE: Yeah, okay. So back to the
- 6 fall-run Chinook salmon that's not a listed fish,
- 7 Mr. Kier, but that -- in your opinion, should that fish
- 8 also be protected with flow?
- 9 WITNESS KIER: If I understand your question
- 10 correctly, that was the whole point and purpose of my
- 11 testimony to the Board in 2010 was that freshwater
- 12 through-flow from the Sacramento River to the Bay was
- 13 essential for the survival and health of fall-run
- 14 Chinook salmon.
- 15 CO-HEARING OFFICER DODUC: Ms. Sheehan.
- MS. SHEEHAN: I'm sorry, but I'd like to
- 17 object again. He generally said that he supports the
- 18 flow policy report, and that's fine. But now he's
- 19 talking about what he testified to back in 2010, which
- 20 is not in his testimony.
- 21 CO-HEARING OFFICER DODUC: He actually said he
- 22 testified.
- 23 MS. SHEEHAN: I understand he testified, but
- 24 does that mean that he now gets to talk about, for the
- 25 first time, everything that he recalls that he

1 testified about? It's not actually in his testimony

- 2 that he submitted.
- What he testified to exactly is not in the
- 4 testimony that he provided as a part of these
- 5 proceedings.
- 6 CO-HEARING OFFICER DODUC: Ms. Meserve, your
- 7 response.
- 8 MS. MESERVE: I actually didn't ask him what
- 9 he testified to. I'm asking him what his opinion is
- 10 today. And in his answer, he referred to his
- 11 testimony, which I think remains his opinion today.
- 12 CO-HEARING OFFICER DODUC: All right.
- 13 Overruled.
- MS. MESERVE: And so with respect to the
- 15 application of the 2010 Flow Criteria that you
- 16 recommend in your testimony, is it fair to say that's
- 17 not based upon whether the fish happens to be listed or
- 18 not?
- 19 WITNESS KIER: Could you ask that again,
- 20 please?
- 21 MS. MESERVE: Keeping with the example of the
- 22 Chinook salmon that we're -- been discussing, is it
- 23 fair to say that your recommendation to -- of the
- 24 importance of flows and the reference to the flow
- 25 report is not tied to whether the particular fish is a

- 1 listed species or not?
- 2 WITNESS KIER: That's correct.
- 3 MS. MESERVE: And why is that?
- 4 WITNESS KIER: The charge from the legislature
- 5 to this Board in 2009 was to develop flow criteria to
- 6 protect public trust resources in the Bay-Delta. And
- 7 public trust resources is a broad array of animals and
- 8 plants and other things.
- 9 So whether a fish is listed under Endangered
- 10 Species Act or not, it may still well be within the
- 11 term "public trust resource," I believe.
- MS. MESERVE: And then if we could scroll up
- 13 to Page 4 of the flow report, please.
- 14 Under the "Flow Criteria and Conclusions," are
- 15 you familiar with the context in those bullet points,
- 16 Mr. Kier?
- 17 WITNESS KIER: Sure, yes.
- MS. MESERVE: And thinking of that first
- 19 bullet there, is it possible that consideration of
- 20 public trust resource protection to which you've just
- 21 referred could include increased flows in the Sac
- 22 River, the San Joaquin River or increased outflows
- 23 beyond what was considered in the 2010 Flow Report?
- 24 CO-HEARING OFFICER DODUC: Ms. Morris.
- 25 MS. MORRIS: Objection, I think going beyond

- 1 -- at least going beyond the 2010 Flow Criteria Report
- 2 is outside the scope.
- 3 CO-HEARING OFFICER DODUC: What do you mean by
- 4 "beyond," Ms. Meserve?
- 5 MS. MESERVE: What I'm doing is testing his --
- 6 he's put forth an endorsement of some of the -- of the
- 7 recommendations of the flow report, and then he's
- 8 familiar with that report and helped develop it. And
- 9 then I'm questioning him about the issue of -- which is
- 10 follow-up to the -- what he just explained was the
- 11 broader array of public trust resources.
- 12 So I'm just trying to understand his opinion
- 13 that he's expressed in his testimony and how far that
- 14 goes.
- 15 CO-HEARING OFFICER DODUC: But just to be
- 16 clear on the record, Ms. Meserve, Mr. Kier did not help
- 17 develop the Flow Criteria Report. Board staff did,
- 18 although Mr. Kier and many others contributed by
- 19 providing expertise which then the staff utilized to
- 20 develop the report.
- MS. MESERVE: Yes, thank you.
- 22 CO-HEARING OFFICER DODUC: Ms. Morris.
- MS. MORRIS: I'd also like to object that
- 24 asking this witness for opinions that go beyond "he
- 25 recommended this " -- asking as to the basis of why he

- 1 recommended that allows him the opportunity to put in
- 2 new testimony that we have not had in writing and we
- 3 have not had the opportunity to cross-examine on.
- 4 So if he wanted to or if his attorneys wanted
- 5 him to provide evidence as to why he's recommending
- 6 this, it should have been submitted in writing. And
- 7 allowing this expansive scope on surrebuttal
- 8 cross-examination, which is really of a friendly
- 9 nature, is inappropriate and outside the scope and
- 10 unfair to petitioners because it's new evidence that
- 11 we've never seen and are not able to question the
- 12 witness on.
- 13 CO-HEARING OFFICER DODUC: Overruled. She's
- 14 allowed to explore the basis for his testimony.
- Ms. Meserve.
- MS. MESERVE: Let me go back.
- 17 So I -- I'm trying to think of what my
- 18 question was.
- 19 I believe the question was, with reference to
- 20 that first bullet point, is it possible, Mr. Kier, that
- 21 protection of public trust resources, consideration of
- 22 that broader context might lead to additional flow
- 23 requirements beyond what was in the 2010 Flow Report?
- 24 WITNESS KIER: I think that's conceivable.
- 25 CO-HEARING OFFICER DODUC: And Ms. Morris, the

- 1 reason why I think this is -- to be fair, yes, Board
- 2 staff did prepare the Flow Criteria Report. But the
- 3 expert opinion that was provided included a broad range
- 4 of flow recommendations, including those that went
- 5 beyond what was in this report.
- 6 So I think her question is within the scope of
- 7 the 2010 Flow Criteria proceedings to which Mr. Kier
- 8 has testified and included in his testimony.
- 9 But you're on a thin edge here, Ms. Meserve.
- 10 MS. MESERVE: Okay. So if we could scroll to
- 11 Page 5 of this same report and look at Item 3, which is
- 12 the outflow and inflow recommendations from the flow
- 13 report.
- 14 Are you familiar with those, Mr. Kier?
- 15 WITNESS KIER: Generally, I'm aware.
- 16 MS. MESERVE: So following up on your prior
- 17 response, is it possible that outflow requirements that
- 18 were protective of all public trust resources and
- 19 beneficial uses might be necessary for, for instance,
- 20 the July-through-December time period?
- 21 MR. BERLINER: Objection.
- 22 CO-HEARING OFFICER DODUC: Mr. Berliner.
- 23 MR. BERLINER: This question lacks foundation.
- 24 There's been no showing that this witness has made
- 25 study on his own or reviewed studies that would support

- 1 the basis for an opinion on this question.
- 2 CO-HEARING OFFICER DODUC: Ms. Meserve.
- 3 MS. MESERVE: Mr. Kier summarized his
- 4 testimony and didn't go over his qualifications in
- 5 detail just now, but I believe that Mr. Kier has, I
- 6 believe he said, six decades of experience in fisheries
- 7 in the Delta. So it would be based on that experience
- 8 that I would be asking this question.
- 9 MR. BERLINER: I'm not --
- 10 CO-HEARING OFFICER DODUC: Mr. Keeling looks
- 11 like he's about to say something.
- MR. KEELING: I'm not sure I understand the
- 13 question. I understand the question to be Mr. Kier,
- 14 who has -- to use somebody else's term -- endorsed the
- 15 recommendations of the 2010 report, is being asked if
- 16 his endorsement is limited to those flow
- 17 recommendations.
- I understood that to be the gist of the
- 19 question, but I may have missed it myself.
- 20 CO-HEARING OFFICER DODUC: Hold on a second.
- 21 If you're asking for opinion beyond --
- MR. KEELING: No.
- 23 CO-HEARING OFFICER DODUC: -- his testimony.
- MR. KEELING: No, no. I think the question --
- 25 I interpret the question to be, "Mr. Kier, is your

- 1 recommendation limited to the flow recommendations of
- 2 the report?" In other words, "You've endorsed the
- 3 report. Now are you saying it should be limited to
- 4 that?" I understood that as the question.
- 5 CO-HEARING OFFICER DODUC: But that his
- 6 testimony is limited to that report.
- 7 MR. KEELING: That would be different from
- 8 saying, "And I -- then I recommend nothing more," or,
- 9 "I recommend that your flow be limited to" -- I --
- 10 maybe I'm misinterpreting Ms. Meserve's question.
- 11 CO-HEARING OFFICER DODUC: Hold on. That was
- 12 not the crux of Mr. Berliner's objection.
- MR. KEELING: Okay.
- 14 CO-HEARING OFFICER DODUC: Mr. Berliner's
- objection, as I understand it, is Mr. Kier's expertise
- 16 and familiarity on this matter in order to opine on the
- 17 specific flows and the basis for those flow
- 18 recommendations.
- 19 Is that correct, Mr. Berliner?
- 20 MR. BERLINER: I'm not challenging Mr. Kier's
- 21 credentials. I am challenging the question that was
- 22 asked concerning increases in flow during a particular
- 23 time period different from anything that's up there
- 24 under No. 3 and whether flows would go higher than the
- 25 2010 Flow Criteria Report for which, if you're going to

- 1 opine that, yes, they should, that needs to be based on
- 2 sound scientific evidence, which is not before us and
- 3 was not reviewed in questioning Mr. Kier.
- 4 CO-HEARING OFFICER DODUC: And which was not
- 5 submitted by Mr. Kier.
- 6 MR. BERLINER: Correct -- well, he didn't
- 7 discuss it in his testimony.
- 8 CO-HEARING OFFICER DODUC: He didn't discuss
- 9 it.
- Your response, Ms. Meserve.
- 11 MS. MESERVE: Again, now, I'm just trying to
- 12 understand the nature of his recommendation and if it
- 13 is intending to be exclusive or not. So I believe I
- 14 could ask the question more in the manner that
- 15 Mr. Keeling expressed it maybe and get through the
- 16 question in a way that is, I think, allowable
- 17 cross-exam on this particular surrebuttal.
- 18 CO-HEARING OFFICER DODUC: So let's see if I
- 19 can understand this. Mr. Kier, your testimony, as I
- 20 recall viewing it, focused on the 2010 Flow Criteria
- 21 Report because it was in response to petitioners'
- 22 witnesses, the three doctors, and their critique of the
- 23 2010 Flow Criteria Report, correct?
- 24 WITNESS KIER: I'm sorry. Could you restate
- 25 the question?

1 CO-HEARING OFFICER DODUC: Your testimony was

- 2 focused on the 2010 Flow Criteria Report?
- 3 WITNESS KIER: Yes. I mean, I was -- I was
- 4 explaining --
- 5 CO-HEARING OFFICER DODUC: Did you --
- 6 WITNESS KIER: I was explaining my role in it
- 7 and the value that I saw in the work of the Board.
- 8 CO-HEARING OFFICER DODUC: Did you offer any
- 9 opinion or testimony beyond the 2010 Flow Criteria
- 10 Report?
- 11 WITNESS KIER: I think not.
- 12 CO-HEARING OFFICER DODUC: Okay.
- Then, Ms. Meserve, your cross should be
- 14 limited to the 2010 Flow Criteria Report that is the
- 15 scope of Mr. Kier's rebuttal testimony.
- MS. MESERVE: Just to clarify, does that mean
- 17 that you wouldn't be allowing me to ask the question in
- 18 the manner that Mr. Keeling had phrased it?
- 19 CO-HEARING OFFICER DODUC: I don't even
- 20 remember how Mr. Keeling phrased it now.
- MS. MESERVE: Yeah. So let me try and then
- 22 see if it follows what your trying to convey.
- 23 So just looking at the first bullet, Mr. Kier,
- 24 which refers to the unimpaired Delta outflow, January
- 25 through June, is there anything in your testimony, in

- 1 your recommendation which would preclude the
- 2 consideration of outflow in other time periods?
- 3 CO-HEARING OFFICER DODUC: I don't know I
- 4 understand the question. Is there anything in his
- 5 testimony --
- 6 MS. MESERVE: In his recommendations in his
- 7 testimony.
- 8 CO-HEARING OFFICER DODUC: Let's try it this
- 9 way.
- 10 Mr. Kier, does your testimony include any
- 11 recommendations beyond what's contained the first
- 12 bullet?
- 13 WITNESS KIER: My 2010 testimony was limited
- 14 to the flow requirements of fall-run Chinook salmon
- 15 from the Sacramento River.
- 16 CO-HEARING OFFICER DODUC: Okay. What about
- 17 your rebuttal testimony before us today -- I'm sorry,
- 18 surrebuttal?
- 19 WITNESS KIER: My surrebuttal testimony simply
- 20 points out that the Flow Criteria Report, in my view,
- 21 was the best piece of work that I had seen in all my
- 22 years of working and that the efforts by the rebuttal
- 23 witnesses to reduce the value of that, I was addressing
- 24 that. I was saying --
- 25 CO-HEARING OFFICER DODUC: But your

- 1 surrebuttal testimony does not make any recommendations
- 2 or mention of any other recommendations beyond the Flow
- 3 Criteria Report?
- 4 WITNESS KIER: That is correct.
- 5 CO-HEARING OFFICER DODUC: Okay.
- 6 So, Ms. Meserve, that will be outside the
- 7 scope.
- 8 MS. MESERVE: Following up on Mr. Kier's
- 9 answer regarding fall-run Chinook salmon, is it true,
- 10 Mr. Kier, that there is no outflow requirement in the
- 11 2010 Flow Criteria for fall, for July through December?
- 12 WITNESS KIER: I believe that the -- I believe
- 13 that the criteria restricted to the spring
- 14 out-migration for Sacramento River fall-run Chinook
- 15 salmon.
- 16 MS. MESERVE: And with respect to the second
- 17 bullet of unimpaired Sacramento River inflow, are you
- 18 aware, Mr. Kier, that the project proponents for the
- 19 tunnels are proposing to measure inflow downstream of
- 20 the three diversions?
- 21 CO-HEARING OFFICER DODUC: Mr. Berliner.
- 22 MR. BERLINER: Objection, beyond the scope of
- 23 his testimony. As he has said many times, his
- 24 testimony bookends with the 2010 Flow Criteria and
- 25 takes on the testimony of three DWR witnesses. This is

- 1 well beyond the scope of what he discussed in his
- 2 testimony.
- 3 CO-HEARING OFFICER DODUC: Mr. Weir -- I'm
- 4 sorry; why do I want to call you "Mr. Weir"?
- 5 MR. JACKSON: Because we've had another
- 6 witness that I believe is very close to "Weir." And I
- 7 think you're going to see him on rebuttal again having
- 8 to do with pictures.
- 9 CO-HEARING OFFICER DODUC: Yes.
- MR. JACKSON: Which you love.
- 11 CO-HEARING OFFICER DODUC: Yes. All right.
- MS. MESERVE: Mr. Wirth.
- 13 CO-HEARING OFFICER DODUC: What is your
- 14 understanding, Mr. Kier, of the inflow that is
- 15 reflected in this bullet which is in the report to
- 16 which he has referenced?
- 17 WITNESS KIER: You're talking about other than
- 18 the January-to-June period?
- 19 CO-HEARING OFFICER DODUC: Yes, the Sacramento
- 20 River inflow, what is your understanding of what
- 21 comprises Sacramento River inflow?
- MS. MESERVE: Not the temporal element, I
- 23 haven't asked about that yet, but the location.
- 24 WITNESS KIER: In my testimony, I urge you to
- 25 use the flow criteria in establishing standards for

1 the -- for the request for change of point of diversion

- 2 from upstream of the diversion point through the --
- 3 through the Delta. I think I make that clear in my
- 4 testimony, that I'm -- and I don't know why flow
- 5 criteria would be established only downstream of the
- 6 project.
- 7 I mean, I think we know how much water it
- 8 takes to get fall-run Chinook salmon from the
- 9 Sacramento River safely through the Delta and Estuary
- 10 and that that amount should be provided the entire
- 11 course from, say, Sacramento through the Delta.
- 12 That was the way I made my recommendation to
- 13 your Board in 2010, and I think that's the way it was
- 14 incorporated in the Flow Criteria Report.
- 15 CO-HEARING OFFICER DODUC: Thank you.
- Ms. Sheehan.
- 17 MS. SHEEHAN: I just wanted to object to the
- 18 question because Ms. Meserve appears to be asking him
- 19 now about criteria as it relates to Cal WaterFix and
- 20 he's specifically only rebutting witnesses who said
- 21 they were only talking about existing conditions and
- 22 specifically were not talking about Cal WaterFix.
- 23 So his surrebuttal can only be in regard to
- 24 the report and existing conditions. He did not testify
- 25 to Cal WaterFix, and the people he's rebutting did not

- 1 testify to Cal WaterFix.
- 2 CO-HEARING OFFICER DODUC: Wasn't the
- 3 implication, Ms. Sheehan, that the witnesses --
- 4 petitioners' witnesses testifying on the 2010 Flow
- 5 Criteria Report were doing so in its application to our
- 6 decision with respect to the petition?
- 7 MS. SHEEHAN: They were testifying in regard
- 8 to there's a lot of information that should be included
- 9 in State Board decision making, whatever form that is,
- 10 but in general that there's a lot of information that
- 11 is great stuff the Board should also consider, and that
- 12 was their testimony.
- 13 CO-HEARING OFFICER DODUC: All right,
- 14 sustained.
- 15 Although I think the way I asked your question
- 16 got the answer you wanted, so let's move on
- 17 Ms. Meserve.
- 18 MS. MESERVE: So just respect to the -- going
- 19 to the temporal elements of the Sacramento River inflow
- 20 recommendation, that could include inflows as you
- 21 defined them just now in your answer in other months
- 22 for other beneficial uses, couldn't it?
- 23 CO-HEARING OFFICER DODUC: Which would go
- 24 beyond the scope of the 2010 Flow Criteria Report.
- MR. JACKSON: Actually, if you looked at

- 1 No. 4 and everybody -- we're looking at just the
- 2 bullets on one page, it talks about fall pulse flows on
- 3 the Sacramento and San Joaquin rivers; it talks about
- 4 other criteria. The Board simply didn't throw out the
- 5 rest of the year, and so I don't understand the
- 6 question.
- 7 MS. MESERVE: I guess, yeah, I was just asking
- 8 Mr. Kier to clarify that his endorsement of the flow
- 9 report wouldn't exclude unimpaired Sacramento River
- 10 inflows as he defined them in other months.
- 11 MR. JACKSON: And I would object on the
- 12 grounds that it misstates that -- his testimony. It's
- 13 my understanding his testimony in regard to the 2010
- 14 report is that it's a great place to start and what's
- 15 in it is a place to start.
- 16 And I'm looking at No. 4 talking about --
- 17 CO-HEARING OFFICER DODUC: All right,
- 18 Mr. Jackson, you're now testifying yourself. But that
- 19 was helpful. Thank you.
- Ms. Meserve, either rephrase or move on,
- 21 please.
- 22 MS. MESERVE: I think I'll leave it at that.
- 23 Thank you.
- 24 CO-HEARING OFFICER DODUC: Thank you.
- 25 Any redirect?

- 1 MS. DES JARDINS: Excuse me.
- 2 MS. MESERVE: I'm sorry. Ms. Des Jardins has
- 3 a cross-exam question. She arrived a little bit late,
- 4 and I wasn't able to get her request in. Is that --
- 5 MS. DES JARDINS: Yes, I apologize for
- 6 arriving late. I had to drive back very -- drive up
- 7 very late from Santa Cruz because of a continually
- 8 changing schedule.
- 9 CO-HEARING OFFICER DODUC: How much time do
- 10 you request?
- 11 MS. DES JARDINS: I'd like 25 minutes, please.
- 12 It may take less.
- 13 CO-HEARING OFFICER DODUC: Let's see what you
- 14 have.
- 15 CROSS-EXAMINATION BY MS. DES JARDINS
- MS. DES JARDINS: Since we're on Exhibit
- 17 SWRCB-25, I'd like to go to PDF Page 56 and 57 of that
- 18 document, please. And can we scroll down.
- 19 And, Mr. Kier, I just wanted to ask you your
- 20 understanding of the biological goals for the Delta
- 21 Flow Criteria Report. This is the first page.
- 22 With respect to salmon, was one of the goals
- 23 to provide floodplain inundation of appropriate timing
- 24 and sufficient duration to enhance spawning and
- 25 rearing.

- 1 CO-HEARING OFFICER DODUC: Mr. Jackson.
- 2 MR. JACKSON: I'm going to object to that
- 3 question as outside the scope of surrebuttal. We were
- 4 rebutting Mr. Hanson, Mr. Hutton, and Mr. Acuna. And I
- 5 do not remember "floodplain."
- 6 MS. DES JARDINS: Mr. Hanson actually talked
- 7 about floodplain inundation.
- 8 CO-HEARING OFFICER DODUC: Did, Mr. Kier,
- 9 specifically --
- 10 Did you discuss floodplain inundation in your
- 11 testimony, Mr. Kier?
- 12 WITNESS KIER: I did not.
- MS. DES JARDINS: Okay. Then let's go to the
- 14 next page, please.
- 15 CO-HEARING OFFICER DODUC: I'm sorry. Hold
- 16 on. Let's make sure the court reporter captured
- 17 Mr. Kier's response.
- 18 THE REPORTER: I did.
- 19 CO-HEARING OFFICER DODUC: Okay.
- MS. DES JARDINS: Thank you.
- 21 So was one of the other goals to provide
- 22 sufficient flows in the Sac River to transport salmon
- 23 smolts through the Delta in the spring?
- 24 CO-HEARING OFFICER DODUC: Ms. Des Jardins,
- 25 since we can all see that bullet, what is your

- 1 question?
- 2 MS. DES JARDINS: I -- I believe, Mr. Kier,
- 3 that was one of the biological goals of the report and
- 4 what you testified on in the proceeding.
- 5 CO-HEARING OFFICER DODUC: That's what it
- 6 says. What is your question?
- 7 MS. DES JARDINS: Well, I'd also like,
- 8 following up on that, to say -- was -- another goal was
- 9 specifically maintaining water temperatures and
- 10 dissolved oxygen to -- is another goal to transport --
- 11 to support adult Chinook salmon migration through
- 12 maintaining water temperatures in the main stem rivers?
- 13 CO-HEARING OFFICER DODUC: And that's what it
- 14 says.
- 15 Mr. Jackson.
- 16 MR. JACKSON: Yes, I'm going to object to this
- 17 line of questioning on the grounds that the document's
- 18 in evidence and it speaks for itself.
- 19 MS. DES JARDINS: Well --
- 20 CO-HEARING OFFICER DODUC: Ms. Des Jardins --
- MS. DES JARDINS: I --
- 22 CO-HEARING OFFICER DODUC: Ms. Des Jardins --
- MS. DES JARDINS: I just --
- 24 CO-HEARING OFFICER DODUC: Ms. Des Jardins.
- MS. DES JARDINS: Yes?

1 CO-HEARING OFFICER DODUC: Your role in

- 2 conducting cross-examination is to solicit additional
- 3 evidence for the record, not to simply restate and
- 4 repeat what is already in the document that we can all
- 5 see.
- 6 MS. DES JARDINS: Well --
- 7 CO-HEARING OFFICER DODUC: So please ask your
- 8 specific question to Mr. Kier.
- 9 MS. DES JARDINS: Thank you.
- 10 Mr. Kier, don't -- don't -- aren't the
- 11 temperature conditions on the main stem rivers, don't
- 12 those apply in the fall? Isn't [sic] adult migration
- 13 of salmon occur in the fall?
- 14 WITNESS KIER: It begins in the fall.
- MS. DES JARDINS: Yes. And so --
- 16 WITNESS KIER: For fall-run Chinook salmon.
- MS. DES JARDINS: Yeah. And wouldn't
- 18 requirements to maintain water temperatures to protect
- 19 adult migration -- to support adult Chinook salmon
- 20 migration apply in the fall as well?
- 21 WITNESS KIER: Yes.
- MS. DES JARDINS: Okay. Thank you. That was
- 23 what I wanted to get to.
- 24 And then I'd like to go to -- your testimony
- 25 refers to Dr. Kjeslon's testimony, 1987 testimony. And

- 1 I'd like to go to Exhibit PCFFA-149, Page 51, about
- 2 some of the bases of your opinions.
- 3 PDF Page 51, thank you. And let's scroll out
- 4 a little.
- 5 So it's -- is this graph part of the basis of
- 6 CalSim's conclusion, the -- for -- the minimum flows of
- 7 20,000 to 30,000 cfs in -- this -- is this a graph of
- 8 survival of salmon smolts versus Rio Vista flow?
- 9 MR. KEELING: I'm going to object. This -- I
- 10 think I understand the question, but this seems to go a
- 11 bridge too far beyond the scope of Mr. Kier's
- 12 surrebuttal. And if he's --
- 13 CO-HEARING OFFICER DODUC: All right.
- MR. KEELING: If he has some working
- 15 familiarity, that's another thing. But this is not
- 16 within his surrebuttal.
- 17 CO-HEARING OFFICER DODUC: Sustained.
- 18 MS. DES JARDINS: Okay. I'd like to go to the
- 19 summary on Page 77.
- 20 Mr. Kier, can you read the section on summary?
- 21 WITNESS KIER: Yes.
- 22 MS. DES JARDINS: Is this section -- is this
- 23 summary by Mr. Kjelson consistent -- the ba- -- partly
- 24 the basis of your own recommendations in the 2010 Flow
- 25 Criteria?

- 1 WITNESS KIER: I believe I incorporated
- 2 Dr. Kjelson's work in my presentation to the Board in
- 3 2010.
- 4 MS. DES JARDINS: And it's not -- so it's not
- 5 just maximum survival with flows at or above 20,000 to
- 6 30,000 cfs, correct? There's other recommendations as
- 7 well?
- 8 WITNESS KIER: That is correct.
- 9 MS. DES JARDINS: One of them is the
- 10 temperatures of below 66 degrees?
- 11 WITNESS KIER: You're asking what?
- MS. DES JARDINS: Yeah. Isn't that one of the
- 13 recommendations?
- 14 WITNESS KIER: I'm sorry. I can't hear you.
- MS. DES JARDINS: Is one of the
- 16 recommendations that temperatures be below 66 degrees?
- 17 WITNESS KIER: There it is on the screen.
- MS. DES JARDINS: And in your own
- 19 understanding, that's very important for salmon; isn't
- 20 that correct?
- 21 WITNESS KIER: I included a temperature
- 22 recommendation in the testimony that I provided the
- 23 Board in 2010.
- MS. DES JARDINS: And another recommendation
- 25 of CalSim was that flow is seaward in the lower San

- 1 Joaquin River at Jersey Point; is that correct, that
- 2 there's a recommendation on no -- of no reverse flows
- 3 as well?
- 4 WITNESS KIER: What's your question?
- 5 MS. DES JARDINS: So are -- is the elimination
- of reverse flows, in your understanding, also very
- 7 important for salmon survival?
- 8 MR. BERLINER: Objection.
- 9 CO-HEARING OFFICER DODUC: Mr. Berliner.
- 10 MR. BERLINER: This goes beyond the scope of
- 11 his testimony. He doesn't discuss reverse flows.
- 12 MR. KEELING: On top of that, it's asked and
- 13 answered. I think the answer is encompassed in his
- 14 previous response.
- 15 CO-HEARING OFFICER DODUC: Sustained.
- 16 MS. DES JARDINS: Okay. The 2010 Delta Flow
- 17 Criteria Report recommendations do discuss limits on
- 18 reverse flows, so I was just -- that was the basis of
- 19 my question.
- 20 I'd like to go to Page 9 of SJC-364, please,
- 21 and Page 1.
- 22 CO-HEARING OFFICER DODUC: Sorry. Page 1 or
- 23 Page 9?
- MS. DES JARDINS: Page 9, at Line 1, sorry.
- 25 And, Mr. Kier, you discussed -- you mentioned

- 1 the exhibits of the State and Federal Water Contractors
- 2 here. I want to ask you about the witnesses who
- 3 appeared for the State and Federal Water Contractors.
- 4 And to refresh your memory, I'd like to pull up Exhibit
- 5 DDJ-349.
- If we could scroll down, please.
- 7 Mr. Kier, based on this witness list and your
- 8 own recollection, was Chuck Hanson the witness for the
- 9 State and Federal Water Contractors in the 2010 Delta
- 10 Flow Criteria proceeding?
- 11 MR. BERLINER: Objection, relevance.
- 12 CO-HEARING OFFICER DODUC: Ms. Des Jardins.
- 13 MS. DES JARDINS: I think it's relevant in the
- 14 extent that these are experts who appeared for the
- 15 State and Federal Water Contractors and who were paid
- 16 for that testimony. The witness's testimony maybe
- 17 influenced
- 18 by -- to the extent that it wasn't the Department of
- 19 Water Resources.
- 20 CO-HEARING OFFICER DODUC: I don't understand
- 21 the justification.
- 22 MS. DES JARDINS: The Board itself has cited
- 23 a decision which states that weight of an expert
- 24 testimony should be partly considering who paid for the
- 25 testimony. And to the extent these were witness for

- 1 the State and Federal Contractors --
- 2 CO-HEARING OFFICER DODUC: You may make that
- 3 argument in your closing briefs.
- 4 MS. DES JARDINS: I can't if it's not in
- 5 evidence and I can't ask the question.
- 6 MR. JACKSON: It is in evidence in
- 7 cross-examination. And a list showing these same
- 8 panels is in evidence already and was responded to by
- 9 Mr. Hanson in which he said he didn't remember being on
- 10 that many panels but he had been on the panels. So I
- 11 think it's asked and answered.
- 12 CO-HEARING OFFICER DODUC: In any case, it's
- 13 outside the scope of Mr. Kier's testimony.
- MS. DES JARDINS: Okay. Thank you. That
- 15 concludes my questions.
- 16 CO-HEARING OFFICER DODUC: All right.
- 17 Redirect request?
- MR. KEELING: We have no redirect. And I
- 19 believe this is the last surrebuttal panel for
- 20 San Joaquin County protestants.
- 21 So at this time, I would move into evidence
- 22 all of Mr. Kier's testimony, which is SJC-364, as well
- 23 as his statement of qualifications, which is 363, and
- 24 the many exhibits that I won't take the time to list
- 25 that were submitted in conjunction with those exhibits

- 1 on the surrebuttal.
- 2 CO-HEARING OFFICER DODUC: Thank you.
- 3 Mr. Jackson, did CSPA have any exhibits?
- 4 MR. JACKSON: The exhibits are joint exhibits,
- 5 and we did that as a matter of time on surrebuttal.
- 6 And that is, this is the end of our surrebuttal case as
- 7 well, and so I would join in the motion.
- 8 CO-HEARING OFFICER DODUC: All right.
- 9 Objections?
- 10 MR. BERLINER: Yes.
- 11 CO-HEARING OFFICER DODUC: Mr. Berliner.
- 12 MR. BERLINER: Tom Berliner on behalf of DWR.
- 13 We object to several of the submittals being
- 14 proposed by San Joaquin County and CSPA.
- 15 CO-HEARING OFFICER DODUC: If you could move
- 16 to microphone closer.
- 17 MR. BERLINER: Sorry. We object to several of
- 18 the exhibits that are being proposed for -- as evidence
- 19 by San Joaquin County and CSPA that are -- waver from
- 20 our standard practice. I objected earlier to all of
- 21 them as not being supported by the testimony and was
- 22 overruled.
- 23 However, there are a number of items that are
- 24 on this list that I won't go through one by one but are
- 25 not self-authenticating. Yes, they are exhibits from

- 1 the 2010 Flow proceeding. We're not disputing that.
- 2 But there have been a number of exhibits that are --
- 3 let's call it "casual," if that's a fair description,
- 4 and that were not relied on; their veracity has not
- 5 been demonstrated.
- 6 CO-HEARING OFFICER DODUC: Mr. Berliner, let
- 7 me interrupt. It sounds like you have a long list of
- 8 exhibits as well as a long list of objections that you
- 9 wish to voice. Let us give you until noon tomorrow to
- 10 file that in writing.
- 11 And Mr. Keeling, Mr. Jackson, you may have
- 12 until noon on Monday to respond.
- MR. BERLINER: Thank you very much.
- MR. KEELING: Thank you very much.
- 15 CO-HEARING OFFICER DODUC: Mr. Kier, with
- 16 that, thank you.
- 17 Mr. Jackson, anything to add?
- 18 MR. JACKSON: Yes. Just since I don't know
- 19 which exhibits we're talking about yet and I don't
- 20 particularly want to know until -- I think that's a
- 21 fine procedure to do it.
- But I take it that, if they're not
- 23 specifically objected to in writing, they go into
- 24 evidence?
- 25 CO-HEARING OFFICER DODUC: Correct.

1	MR. JACKSON: Thank you.
2	CO-HEARING OFFICER DODUC: All right. With
3	that, I think we deserve an earlier break. Why don't
4	we take our lunch break now so that we can go to the
5	Farmers Market. Oh, Mr. Bezerra's not here to prevent
6	us from doing that.
7	In any case, we will return at 12:45.
8	(Whereupon, the luncheon recess was taken
9	at 11:45 a.m.)
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- 1 Tuesday, September 26, 2018 12:45 p.m.
- 2 PROCEEDINGS
- 3 ---000---
- 4 CO-HEARING OFFICER DODUC: All right. It is
- 5 12:45. We're back in session.
- 6 Miss Meserve.
- 7 MS. MESERVE: Good afternoon.
- 8 We have our one witness for LAND this
- 9 afternoon, Russell van Loben Sels.
- 10 CO-HEARING OFFICER DODUC: All right. Welcome
- 11 back.
- 12 And before we get to you, I believe,
- 13 Miss Morris, do you have an objection?
- MS. MORRIS: (Nodding head.)
- 15 CO-HEARING OFFICER DODUC: Please state your
- 16 objection.
- 17 MS. MORRIS: Thank you.
- I have several objections that I'll walk
- 19 through.
- 20 The first is -- And this is on the testimony
- 21 of Russell van Loben Sels, LAND-305, beginning on
- 22 Page 2, Line 7 through Page 3, Line 16.
- 23 This section is outside the scope of
- 24 surrebuttal as it does not cite to or respond to
- 25 SWRCB-1113, the Supplemental, and there are no document

1 changes from the final to the Supplemental in terms of

- 2 water quality.
- 3 All the cites in this section are to SWRCB-110
- 4 and -111, which are not the Supplemental document,
- 5 environmental document.
- 6 CO-HEARING OFFICER DODUC: Miss Morris -- I'm
- 7 sorry -- before you continue, please give me that
- 8 specific section again in 305.
- 9 MS. MORRIS: Sure. It's Page 2, Line 17.
- 10 CO-HEARING OFFICER DODUC: Page 2, Line 17.
- 11 Okay.
- MS. MORRIS: Through Page 3, Line 16.
- They're all scope, so do you want me to go
- 14 through them all, or do you want to tackle them one at
- 15 a time?
- 16 CO-HEARING OFFICER DODUC: Let's hear a
- 17 response from Miss Meserve one at a time and then we'll
- 18 take them all into consideration.
- 19 Miss Meserve, her objection is Page 2, Line 17
- 20 through Page 3, Line 16.
- MS. MORRIS: Line 7. To Line 7.
- 22 CO-HEARING OFFICER DODUC: To Line 7. Sorry.
- 23 MS. MESERVE: The way Mr. van Loben Sels and I
- 24 have reviewed the Admin Draft Supplemental EIR, and it
- 25 includes some new analysis regarding certain impacts,

- 1 and then it relies on the same Mitigation Measures,
- 2 which is SWRCB-111, as the Final EIR did.
- 3 So, what Mr. van Loben Sel's testimony is
- 4 explaining is that he continues to be concerned about
- 5 those impacts even in light of the new information put
- 6 forth in the Admin Draft EIR.
- 7 So, I believe, especially based on the
- 8 clarifications issued earlier this morning with respect
- 9 to the proper scope of surrebuttal being responsive to
- 10 the Admin Draft SEIR, that this would fall within that.
- 11 CO-HEARING OFFICER DODUC: I'm not sure I
- 12 understand how that is responsive to the Administrative
- 13 Draft.
- 14 MS. MESERVE: The Admin Draft SEIR relies on
- 15 the materials that are cited in here to address
- 16 salinity and Microcystis are the water quality concerns
- 17 mentioned by Mr. van Loben Sels.
- So, to the extent that the Admin Draft
- 19 continues to rely on those, that's what he's responding
- 20 to.
- 21 MS. MORRIS: And to be clear, what it does
- 22 cite to is MMRPs which have been part of this record
- 23 for quite some time, as well as the Statement of
- 24 Overriding Considerations for the Final EIR.
- 25 There's no citation in this section or

- 1 reference to the Supplemental.
- 2 CO-HEARING OFFICER DODUC: There is no
- 3 citation to the Administrative Draft, Miss Meserve.
- 4 MS. MESERVE: It's cited earlier on in the
- 5 testimony.
- 6 CO-HEARING OFFICER DODUC: But not in this
- 7 section.
- 8 MS. MESERVE: I don't think . . .
- 9 CO-HEARING OFFICER DODUC: And in what way is
- 10 it responsive to the four issues that is the scope of
- 11 surrebuttal?
- MS. MESERVE: Item 1 says (reading):
- 13 "New information concerning changes
- 14 described in the Admin Draft SEIR."
- 15 And then you clarified this morning that it's
- 16 not the burden on Petitioners to figure out what was
- 17 different since the Final EIR -- or that we're talking
- 18 about everything that's happened since the Final EIR,
- 19 so . . .
- 20 The other thing that I think didn't get
- 21 brought up this morning but is relevant is that the
- 22 scope of the analysis in the Admin Draft EIR (sic),
- 23 many of us believe it's not expansive enough to include
- 24 all the things that may change from the changes in
- 25 operations or other things, right. So, I think it's

1 within the realm of what surrebuttal was defined to be.

- 2 And if the Admin Draft SEIR didn't rely on
- 3 that set of Mitigation Measures, I think Miss Morris
- 4 might have a point. But since it does rely on those
- 5 same Mitigation Measures to supposedly address the
- 6 impacts that Mr. van Loben Sels is concerned about, I
- 7 believe he's within -- he's within the proper scope to
- 8 be responding to that.
- 9 And if there's additional detail, you know,
- 10 it's the kind of thing that I think could be addressed
- 11 in briefing if -- if you're inclined to hear more about
- 12 it.
- 13 CO-HEARING OFFICER DODUC: Miss Morris, next
- 14 objection, please.
- MS. MORRIS: Thank you.
- Beginning on LAND-305, Page 3, Lines 17
- 17 through Page 4, Lines 25.
- 18 There is -- This is outside the scope of the
- 19 testimony of rebuttal on the Supplemental. It tries to
- 20 connect the ADSR. It says that the claim (reading):
- 21 ". . . Changes the Project footprint of
- the tunnels will 'avoid crossing under
- 23 the community and to avoid affecting
- 24 municipal water wells.'"
- 25 But yet, then it goes on throughout the rest

- 1 of it to talk about and to refer to existing analysis.
- 2 In fact, the groundwater mitigation hasn't
- 3 changed, nor were there changes in the groundwater in
- 4 the Supplemental analysis.
- 5 So, again, this is outside the scope.
- 6 And then, furthermore, specifically in that
- 7 section on Page 4, Lines 5 through the end, they --
- 8 again, there's no citation to the Supplemental Draft.
- 9 Rather, it's all to existing testimony that has already
- 10 been put in by LAND or others.
- 11 CO-HEARING OFFICER DODUC: Response,
- 12 Miss Meserve.
- MS. MESERVE: I think it's the very fact that
- 14 the SEIR Admin Draft did not include any analysis of
- 15 the change that Mr. van Loben Sel's testimony is
- 16 responding to.
- 17 And if you go to the groundwater chapter of
- 18 the Admin Draft SEIR, there's, like, two and a half
- 19 pages there that basically say nothing, and that's what
- 20 we're responding to.
- 21 CO-HEARING OFFICER DODUC: Next --
- MS. MORRIS: There's --
- 23 CO-HEARING OFFICER DODUC: -- objection.
- MS. MESERVE: -- no change, so . . .
- Page 5, Line 18 through Page 6, Lines 9.

1 Again, this is outside the scope. There is no

- 2 new. It even says that it's "the same flawed
- 3 mitigation." It doesn't cite to ADAREIS. And it --
- 4 it's really just citing back to the MMRPs as well as to
- 5 previous testimony that has been submitted by other
- 6 people into this record.
- 7 So it's outside the scope, and it's also
- 8 duplicative.
- 9 CO-HEARING OFFICER DODUC: Response,
- 10 Miss Meserve?
- MS. MESERVE: This is one of the areas, like
- 12 the groundwater one before, where there are changes to
- 13 the Project and the Project footprint.
- 14 For instance, there's quite a bit of more
- 15 acreage of agricultural land would be converted. So I
- 16 think it's within the scope of the testimony to comment
- 17 on the adequacy of the same old mitigation measures
- 18 being applied to even more severe impact on agriculture
- 19 in the Delta.
- 20 CO-HEARING OFFICER DODUC: Next objection.
- MS. MORRIS: Same exhibit, LAND-305, Page 6,
- 22 Lines 12 through 17.
- 23 This, again, is not talking about the -- or
- 24 rebutting anything in the Administrative Draft. It's
- 25 really just previous -- It's just stating and

1 referencing duplicative testimony that's already been

- 2 put into evidence.
- 3 CO-HEARING OFFICER DODUC: Let me make sure I
- 4 get that.
- 5 Page 7 (sic), Line 12 through 17?
- 6 MS. MORRIS: Right. Page 6, Line --
- 7 CO-HEARING OFFICER DODUC: Page 6, I'm sorry.
- 8 MS. MORRIS: -- 12 through Line 17.
- 9 There's a whole other part of this section
- 10 that I'm not moving to strike but it's just that
- 11 portion that is referring to and incorporating other
- 12 testimony that is outside the scope and not relevant to
- 13 the surrebuttal topic on new information.
- 14 I recognize that the rest of it is responding
- 15 directly to -- not directly -- but there was testimony
- 16 by DWR witnesses about traffic impacts. So I'm not
- 17 moving to strike that.
- 18 CO-HEARING OFFICER DODUC: Response,
- 19 Miss Meserve?
- 20 MS. MESERVE: The way this is written, it's
- 21 just an introductory paragraph to introduce the topic
- 22 of transportation. I don't see why it would be
- 23 objectionable.
- MS. MORRIS: It incorporates several other
- 25 testimony. It's not just introductory. It's

- 1 incorporating other pieces of testimony that may not
- 2 have relevant information to this topic.
- 3 MS. MESERVE: Well, I think Mr. van Loben Sels
- 4 is saying that it is relevant. He's a Yolo County
- 5 resident. He farms also in Sacramento County. And he
- 6 was concerned about the exhibits that he saw, and then
- 7 he goes on to explain what his new concerns would be as
- 8 part of his testimony.
- 9 CO-HEARING OFFICER DODUC: Next objection.
- 10 MS. MORRIS: LAND-305. This is beginning on
- 11 Page 7, Line 18 all the way through 8, Line 23.
- 12 This section is outside the scope. This is
- 13 dealing with cultural resources and specifically with
- 14 the Rosebud Rancho which has been the subject of
- 15 testimony in Part 1.
- 16 Their -- The EIR/EIS, even though it's cited
- 17 here, it -- there's no evidence in that that it's
- 18 changing. In fact, the EIR/EI -- the Supplemental
- 19 EIR/EIS says there's no changes to cultural impacts and
- 20 it does not reference at all Rosebud Ranchero (sic).
- 21 So this is outside the scope of the
- 22 surrebuttal topic.
- 23 CO-HEARING OFFICER DODUC: Response?
- MS. MESERVE: Well, in fact, Page 18A-2 as
- 25 indicated on Page 7, Line 24, those reference Rosebud

1 Rancho. And it continues to misstate the condition of

- 2 Rosebud Rancho and whether it is, in fact, a
- 3 significant cultural resource. And Mr. van Loben Sels
- 4 is disagreeing with that as part of the Admin Draft
- 5 SEIR.
- 6 MS. MORRIS: And that, again, is duplicative
- 7 testimony from Part 1.
- 8 CO-HEARING OFFICER DODUC: Next objection.
- 9 MS. MORRIS: Looking at Page 8, Line 24
- 10 through Page 9, Line 18.
- 11 The assertion is that more than 9,000 cfs can
- 12 be diverted, but the testimony itself references that
- 13 the EIR/EIS says it would remain at 9,000.
- 14 There's been no change in the capacity of the
- 15 three tunnel intakes, and those were not referenced in
- 16 the Supplemental EIR and, therefore, it's outside the
- 17 scope of the surrebuttal topics.
- 18 CO-HEARING OFFICER DODUC: Miss Meserve.
- 19 MS. MESERVE: Mr. van Loben Sels is responding
- 20 to the assertion in the Admin Draft SEIR that the
- 21 maximum capacity is 9,000 cfs. And since that time,
- 22 there has been additional information which indicates
- 23 that that number is not the maximum capacity.
- 24 That also responds to rebuttal testimony that
- 25 was put forth in cross-examination of Mr. Bednarski, I

- 1 believe.
- 2 So, to the extent the SEIR is representing
- 3 something as a maximum capacity, this testimony
- 4 disagrees with that characterization and response.
- 5 CO-HEARING OFFICER DODUC: Question,
- 6 Mr. Deeringer?
- 7 MR. DEERINGER: Miss Morris, with respect to
- 8 this motion to strike, it sounded like your argument
- 9 was limited to the Administrative Draft.
- 10 Would your motion change or would you withdraw
- 11 it if that information was present in the Conceptual
- 12 Engineering Report?
- MS. MORRIS: I don't believe -- Well, I -- I
- 14 would argue the same reason, that the Conceptual
- 15 Engineering Report leaves the tunnel intake capacity at
- 16 9,000, 3,000 per intake. There's no change in either
- 17 of those documents.
- 18 MR. DEERINGER: Thank you.
- 19 CO-HEARING OFFICER DODUC: Next objection.
- 20 MS. MORRIS: The last one to the testimony,
- 21 LAND-305, Page 9.
- 22 This -- I'm breaking this up because I think
- 23 there's some relevance here and it's within the scope.
- So my objection is the Heading C, which is on
- 25 Lines 19 to 20.

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1 And then also, for the same reason, on
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- 2 Page 10, Line 10 through 22, that this testimony is
- 3 discussing the -- a change to Bureau participation as
- 4 well as the Coordinated Operations Agreement, and that
- 5 that is outside the scope of the Supplemental.
- 6 The Supplemental does not identify any change
- 7 in the Project in this manner, and -- nor does it
- 8 reference Coordinated Operations Agreement.
- 9 In addition --
- 10 CO-HEARING OFFICER DODUC: Miss Meserve.
- MS. MORRIS: -- to that -- Sorry.
- 12 CO-HEARING OFFICER DODUC: Oh, I'm sorry.
- MS. MORRIS: This -- It also tries to link the
- 14 relevance in by citing the CER, but the CER is a
- 15 construction document. This is how you construct the
- 16 Project, not how you operate the Project.
- So, to the extent that there's a tie that they
- 18 struck the CER and tells how it's going to be operated,
- 19 that's incorrect factually, and so those would be also
- 20 outside the scope.
- 21 CO-HEARING OFFICER DODUC: Miss Meserve.
- 22 MS. MESERVE: As directly quoted from the CER
- 23 at the top of Page 10, first and second bullets, the
- 24 CER explains how the operations would change.
- 25 So that's incorrect to say that the CER is

- 1 construction and not operation. It goes through, in
- 2 particular, the changes that are proposed with the
- 3 Byron Tract Forebay. And that's what this testimony
- 4 responds to.
- 5 And that's how the materials objected to lower
- 6 on Page 10 are responding to that . . . the greater
- 7 level of coordination between DWR and Reclamation that
- 8 the CER has identified as being a change from the prior
- 9 version of the CER.
- 10 CO-HEARING OFFICER DODUC: Miss Morris.
- 11 MS. MORRIS: The CER talks about not
- 12 operations but how it will require coordination. And,
- 13 again, none of that coordination's changed.
- 14 The change that it's referencing to at that
- 15 site is the difference between the Clifton Court
- 16 Forebay and the Byron Tract Forebay and it's not
- 17 related to Coordinated Operations Agreement, which has
- 18 to do much more with sharing of responsibilities as
- 19 well as sharing in excess times, not how you operate
- 20 certain facilities.
- 21 MS. MESERVE: Sounds to me like something that
- 22 DWR and the State Water Contractors can argue in their
- 23 closing briefs.
- MS. MORRIS: I have a couple more objections.
- 25 Should I go?

1 CO-HEARING OFFICER DODUC: Miss Des Jardins is

- 2 behind you.
- 3 MS. MORRIS: Oh.
- 4 CO-HEARING OFFICER DODUC: I think she wants
- 5 to chime in on this.
- 6 MS. DES JARDINS: I just would like to say
- 7 that there is a whole section of the CER that discusses
- 8 facility operations, and Miss Morris' objection
- 9 mischaracterizes that section.
- 10 CO-HEARING OFFICER DODUC: Miss Morris.
- 11 MS. MORRIS: I don't think you need me to
- 12 respond to that; do you?
- 13 CO-HEARING OFFICER DODUC: No.
- MS. MORRIS: Okay. The -- The other
- 15 objections I have is to two citations of exhibits. And
- 16 that's LAND-309, which is the Supplemental EIR
- 17 comments.
- 18 And the reason I'm objecting to this is their
- 19 reference in this testimony. And they go outside the
- 20 scope of the Supplemental -- the changes in the
- 21 Supplemental EIR.
- 22 For example, they talk about Project
- 23 Description. They also attach numerous exhibits that
- 24 go outside the scope of the Supplemental EIR
- 25 surrebuttal scope that's been identified.

1 For example, they're also duplicative because

- 2 two of the exhibits happen to be testimony already
- 3 submitted in this hearing.
- 4 And then the last one is on LAND-310, which is
- 5 a COA letter.
- 6 And, again, I would make the objection that
- 7 it's outside the scope of the sur -- surrebuttal
- 8 identified in the hearing -- I'm sorry -- in the
- 9 September 10th ruling.
- 10 CO-HEARING OFFICER DODUC: Miss Meserve, your
- 11 response to the objection to citations of LAND-309 and
- 12 310.
- MS. MESERVE: With respect to the 309, which
- 14 is the LAND comment letter, I don't believe that
- 15 exhibits are held to the same standard as the testimony
- 16 with respect to the scope.
- I believe we have a lot of exhibits that
- 18 probably touch on a lot of topics that may not be
- 19 within the scope of rebuttal, as the Hearing Officers
- 20 have defined it. So I don't think that's the rule.
- 21 I will say the reason it was attached is
- 22 because it includes information that Mr. van Loben Sels
- 23 reviewed.
- 24 And, in addition, a few of the exhibits are
- 25 specifically referenced, you know, by Mr. van Loben

- 1 Sels in his -- in particular, with respect to the
- 2 cultural resource testimony he provides and his concern
- 3 about Rosebud Rancho.
- 4 So it was a matter of expediency to just
- 5 attach the letter that had the exhibits.
- 6 So I don't believe there's any -- I believe
- 7 the current rule that --
- 8 CO-HEARING OFFICER DODUC: Miss Meserve, did
- 9 he review the entire comment letter or just sections of
- 10 it in preparing his testimony?
- 11 Or I should ask him that. Sorry.
- 12 WITNESS VAN LOBEN SELS: I reviewed the entire
- 13 letter.
- 14 CO-HEARING OFFICER DODUC: Okay.
- MS. MESERVE: And, then, with respect to the
- 16 Exhibit 310, the COA letter, again, that related back
- 17 to the testimony about this greater coordination.
- 18 And Mr. van Loben Sels in his testimony ties
- 19 together why that reinitiation of coordination may be
- 20 relevant and may be concerning if that higher level of
- 21 coordination is -- is needed under the new design.
- 22 So I believe the parsing hairs about what
- 23 exactly is in the COA and what exactly would be
- 24 renegotiated in trying to pull that away from the
- 25 greater level of daily operational coordination I think

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1 goes -- you know, is way more detailed than the reasons
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- 2 for which it was brought up in his testimony.
- 3 CO-HEARING OFFICER DODUC: Final arguments?
- 4 MS. MORRIS: Just on the comment letter.
- 5 It is referenced in his testimony, so it
- 6 should be within the scope of the surrebuttal.
- 7 As well as it contains many legal arguments
- 8 about the adequacy of CEQA and other things that are
- 9 not proper evidence and are outside the scope.
- 10 CO-HEARING OFFICER DODUC: All right. Thank
- 11 you.
- 12 With that, we shall take a break to consider
- 13 this, and we'll return shortly.
- 14 (Recess taken at 1:06 p.m.)
- 15 (Proceedings resumed at 1:36 p.m.:)
- 16 CO-HEARING OFFICER DODUC: All right. We are
- 17 back in session.
- 18 Let me go through Ms. Morris' objections and
- 19 issue a ruling on each one of them.
- 20 We'll begin with Page 2 -- Oh, this is all
- 21 pertaining to LAND-305.
- Her first objection to Page 2, Line 7 through
- 23 Page 3, Line 16 is sustained. It is outside the scope.
- Her second objection, Page 3, Line 17 through
- 25 Page 4, Line 25, as well as her third objection,

- 1 Page 5, Line 18 through Page 6, Line 9, are overruled.
- 2 The Administrative Draft does contain an analysis on
- 3 mitigation.
- 4 Her next object -- objection was to Page 6,
- 5 Line 12 through 17. That is also overruled since it's
- 6 an introductory framing-the-issue paragraph.
- 7 Her next objection is Page 7, Line 18 through
- 8 Page 8, Line 23. That objection is sustained. The
- 9 Administrative Draft did not contain new Project
- 10 information regarding this matter.
- 11 Her next objection, Page 8, Line 24 through
- 12 Page 9, Line 18, is also sustained. It is outside the
- 13 scope. It was not -- Capacity's not an issue discussed
- 14 in the CER or the Administrative Draft.
- 15 Her objection, Page 9, Line C through -- and
- 16 also Page 10, Line 10 through 22, is overruled. The
- 17 CER was not clear on this matter, so we will -- we will
- 18 allow it. She also objected to LAND-309. That
- 19 objection is overruled. The witness did confirm that
- 20 he considered the entire comment letter in preparing
- 21 his testimony. And to the extent that it does include
- 22 any legal arguments, we will give it the appropriate
- 23 weight.
- 24 And her final objection is to LAND -- the
- 25 citation to LAND-310. That is sustained. This does

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1 not effect a change in the Project as described in the
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- 2 Administrative Draft or the CER. If there were to be
- 3 such a change, that matter would have to come back to
- 4 us for consideration.
- 5 I believe that covers all of your objections,
- 6 Miss Morris.
- 7 MS. MORRIS: (Nodding head.)
- 8 CO-HEARING OFFICER DODUC: Miss Meserve, do
- 9 you need a moment to consult with your client regarding
- 10 the remainder of his testimony?
- 11 WITNESS VAN LOBEN SELS: What I can still say.
- 12 CO-HEARING OFFICER DODUC: Yeah. Let's go
- 13 ahead and take a short break until 1:45 -- I'm sorry --
- 14 1 -- yeah, 1:45.
- MS. MESERVE: Thank you.
- 16 (Recess taken at 1:39 p.m.)
- 17 (Proceedings resumed at 1:45 p.m.:)
- 18 CO-HEARING OFFICER DODUC: All right. Do you
- 19 need more time, Miss Meserve?
- 20 MS. MESERVE: I think we're okay. We'll -- If
- 21 we get it wrong, I'm sure someone will let us know.
- 22 CO-HEARING OFFICER DODUC: I'm sure someone
- 23 will.
- 24 All right. Thank you for that quick huddle.
- Now, please proceed.

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MS. MESERVE: Okay. And Mr. van Loben Sels
1
   has already been sworn in previously, so we don't need
 2
 3
   to go through that.
 5
                    Russel van Loben Sels,
 6
             called as a witness by the For Local
 7
             Agencies of the North Delta, Bogle
 8
             Vineyards/DWLC, Diablo Vineyards/DWLC,
 9
             Stillwater Orchards, DWLC, Islands, Inc.,
             San Joaquin County, San Joaquin County
10
             Flood Control and Water Conservation
11
12
             District, Mokelumne River Water and Power
13
             Authority, and Daniel Wilson:, having
             previously been duly sworn, was examined
14
15
             and testified further as follows:
16
                     DIRECT EXAMINATION BY
             MS. MESERVE: And is LAND-305 a true and
17
   correct copy of your written testimony?
18
19
             WITNESS VAN LOBEN SELS: It is, with the
    exception of: The cite at the end of Page 6 should be
20
    changed to SWRCB-102, Page 19A -- or 19A, Page 34.
21
22
             CO-HEARING OFFICER DODUC: And, Mr. van Loben
   Sels, if you could move the microphone closer to you.
23
24
   Thank you.
25
             WITNESS VAN LOBEN SELS: Yeah. The --
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- 1 CO-HEARING OFFICER DODUC: Is it on?
- 2 WITNESS VAN LOBEN SELS: The cite at the
- 3 bottom of Page 6 needs to be changed to SWRCB-102,
- 4 Page -- 19A, Page 34.
- 5 MS. MESERVE: The page number is correct. It
- 6 just cited to the wrong document.
- 7 CO-HEARING OFFICER DODUC: Thank you.
- 8 MS. MESERVE: And, in preparing for your
- 9 testimony, did you read portions of the Administrative
- 10 Draft Supplemental Environmental Impact Report, the
- 11 2018 CER, and the other materials cited in your
- 12 testimony?
- 13 WITNESS VAN LOBEN SELS: I did.
- MS. MESERVE: If you could go ahead and
- 15 summarize your testimony as modified by the Hearing
- 16 Officer's ruling.
- 17 WITNESS VAN LOBEN SELS: My brother and I are
- 18 fourth-generation farmers, and we own and operate
- 19 Amistad Ranches farming 2400 acres of tomatoes, corn,
- 20 pears, wheat, safflower, alfalfa and grapes.
- 21 I Chair the Delta Caucus, an informal
- 22 organization with the five-county -- Delta County Farm
- 23 Bureaus. I participated as an alternate in the Blue
- 24 Ribbon Task Force, and recently participated in Delta
- 25 Dialogues hosted by the Delta Conservancy.

1 And through these processes, and 48, 49 years

- 2 of farming in the Delta, I'm somewhat aware of the
- 3 State Water Project and the CVP water diversions that
- 4 occur in the Delta, and this proposed Petition that's
- 5 before you today.
- 6 I previously testimony -- test -- test --
- 7 provided testimony for LAND-1 -- in Part 1 pertaining
- 8 to injury to ill -- to legal users of water, as well as
- 9 Part 2, pertaining to public interest considerations.
- 10 This testimony focuses on inadequacy of
- 11 disclosure and mitigation for key effects of the
- 12 Supplemental EIR, as described in the Administrative
- 13 Draft Supplemental EIR, that would affect Delta
- 14 communities.
- In addition, I'm concerned with the
- 16 possibility of expanding, but that's not allowed, so I
- 17 won't go there.
- 18 I'm concerned with the high level of
- 19 concentrate -- coordination between the CVP and SWP
- 20 that the Revised Project would require.
- 21 Impacts of the Revised Project remain
- 22 unacceptable. And mitigation fails to protect the
- 23 public interest in the areas of groundwater,
- 24 agriculture, transportation.
- 25 First of all, groundwater mitigation. The

- 1 ADSEIR changes the Project footprint to avoid affecting
- 2 goods and municipal water wells. Yet the ADSEIR fails
- 3 to address whether the newly proposed tunnel alignment
- 4 and Project changes would result in impacts to
- 5 different water and groundwater resources.
- 6 Neither does the ADSEIR include analysis of
- 7 the hydrologic -- hydrogeological effects of the
- 8 tunnels on wells in areas surrounding the newly aligned
- 9 tunnels and facilities.
- 10 The ADSEIR does not identify existing wells in
- 11 proximity of the tunnel alignment or any analysis of
- 12 impacts to wells, even though the information is
- 13 readily available.
- 14 Instead, the ADSEIR broadly concludes that the
- 15 new alignment will have beneficial effects on
- 16 groundwater resources even though no investigation has
- 17 been done with respect to wells and other water
- 18 resources impacted by the new alignment.
- 19 The Project footprint has significantly
- 20 changed, yet DWR has failed to consider the impacts of
- 21 those changes.
- 22 The ADSEIR also fails to disclose or analyze
- 23 how the changes in tunnel muck placement would impact
- 24 groundwater wells. Further, there is no information
- 25 regarding the location of borrow pits at each intake

- 1 cite.
- 2 The ADEIR does not disclose where material
- 3 will come from or provide maps of their potential
- 4 locations.
- 5 Both of these Project features could adversely
- 6 impact groundwater wells and other resources in the
- 7 Delta, yet the ADSEIR does not address, let alone
- 8 analyze them.
- 9 As explained in previous testimony, I am
- 10 concerned about Project impacts on local wells and
- 11 irrigation and drainage systems during construction and
- 12 operation. Nothing in the ADSEIR relieves those
- 13 concerns.
- Moreover, the decisions to move the tunnel
- 15 alignment away from the Town of Hood indicates that the
- 16 Petitioners may believe that the tunnels would actually
- 17 interfere with groundwater wells.
- 18 The failure to analyze and provide mitigation
- 19 for these impacts indicates a lack of concern for Delta
- 20 communities, agriculture, and the public interest.
- 21 Agricultural impacts would increase. The
- 22 Revised Project described in the ADSEIR would require
- 23 the permanent conversion of 684 more acres of important
- 24 farmland than the Approved -- than the Approved
- 25 Project.

1 The ADSEIR attributes this increase primarily

- 2 to changes in the new Byron Forebay and muck storage
- 3 area.
- 4 The Revised Project would also interfere with
- 5 nine additional miles of agricultural water delivery
- 6 systems and drainage systems.
- 7 The locations of these new impacts are not
- 8 disclosed. These agriculture impacts are classified as
- 9 significant and unavoidable yet not analyzed.
- 10 The discussion of impact AG-2 in the ADSEIR
- 11 does not disclose the broad range of potential impacts
- 12 on agriculture that the Revised Project would have.
- 13 The ADSEIR notes that the conversion of
- 14 farmland and construction of Project facilities would
- 15 create indirect but adverse impacts on agriculture, yet
- 16 does not disclose any of those impacts in detail.
- 17 There is a passing reference to effects
- 18 related to seepage from forebays, as well as changes to
- 19 groundwater elevation. But, again, neither of these
- 20 impacts is analyzed nor specific mitigation proposed.
- 21 No new or improved mitigation is provided for
- 22 the additional significant and unavoidable impacts
- 23 agricultural resources, and they continue to rely on
- 24 the same flawed Mitigation Measures from the Approved
- 25 Project.

- 1 Transportation impacts also remains severe.
- 2 The Revised Project would continue to increase
- 3 traffic delays and degrade road conditions in the Delta
- 4 to significant and unavoidable levels with some changes
- 5 to the location of those impacts.
- 6 Previous testimony has established that the
- 7 interference with agriculture and other activities that
- 8 rely on Delta roadways if traffic levels increase as
- 9 anticipated during construction of the Project.
- 10 The ADSEIR fails to offer any comparison
- 11 between the approved and the Proposed Project with
- 12 respect to levels of service. As a result, it's
- 13 difficult to ascertain whether some segments would have
- 14 increased in traffic under the Proposed Project.
- The ADSEIR claims that the number of segments
- 16 with unacceptable Levels of Service would decrease by
- 17 four roadway segments. And exacerbation of
- 18 inacceptable pavement surfaces would decrease by five
- 19 roadway segments.
- 20 As a Yolo County resident and Delta farmer, I
- 21 am concerned that some of these conclusions regarding
- 22 lesser impacts are incorrect.
- 23 The ADSEIR does not disclose or discuss how
- 24 increases in traffic would impede emergency responders.
- 25 The Project traffic increases throughout the Delta

1 would prevent Fire Departments, law enforcement, from

- 2 effectively responding to emergencies, potentially
- 3 endangering the public and health and safety.
- 4 I believe that the Project would interfere
- 5 with the effectiveness of emergency responders which
- 6 would not be in the interest of the local communities.
- 7 The 2018 CER describes a new project design
- 8 where water from the tunnels would be conveyed to a new
- 9 forebay located at Byron Tract rather than to an
- 10 expanded Clifton Court Forebay as previously planned.
- 11 The 2018 CER describes a complicated, daily
- 12 schedule for integration of operations. These
- 13 operations appear to be influenced by a variety of
- 14 factors, including the Sacramento River flows and
- 15 stages, tides, water surface elevations at the
- 16 Intermediate Forebay, the Byron Court Forebay, the old
- 17 Clifton Court Forebay, pumping schedules in the South
- 18 Delta by CVP and SWP pumps, as well as power
- 19 availability and cost, all very complicated, many
- 20 different moving parts, and I am very concerned about
- 21 the complexity of operating the system without doing
- 22 damage to the Delta.
- 23 In addition, the relationship between CVP and
- 24 SWP is already somewhat complex with regards to
- 25 complying with all of the rules and regulations as far

- 1 as meeting the -- the -- the . . . meeting all of the
- 2 regulatory requirements with regards to water.
- 3 And on top of that, we have -- the CVP has
- 4 notified the SWP that they wish to -- to change the --
- 5 CO-HEARING OFFICER DODUC: Mr. van Loben Sels,
- 6 that part was struck.
- 7 WITNESS VAN LOBEN SELS: Okay. Let me try it
- 8 from a little different direction.
- 9 In my experience with the Delta Dialogues and
- 10 other Delta processors, it's my understanding that the
- 11 relationship between CVP and the SWP to coordinate
- 12 Delta exports, including responsibility for meeting
- 13 regulatory requirements, is already complex. That
- 14 relationship was formally defined in the 1968
- 15 Coordinated Operating Agreement.
- 16 The additional complexity now being proposed
- 17 associated with the interoperation of the various SWP
- 18 and CVP components and proposed in the Revised Project
- 19 described in the 2018 CER, combined with the complex
- 20 existing background conditions, would appear to make
- 21 successful operation of the Revised Project even more
- 22 difficult.
- In conclusion, I believe that the changes to
- 24 the Delta Tunnels Project described in the ADSEIR do
- 25 not improve conditions for Delta communities and may,

- 1 in fact, worsen the Project impacts.
- 2 The mitigation and other commitments provided
- 3 by the Petitioners would not, in my opinion, ensure
- 4 continuation of healthy and vibrant communities and
- 5 productive farming in the Delta.
- 6 As a result, the Revised Project would not be
- 7 in the public interest.
- 8 CO-HEARING OFFICER DODUC: Thank you, Mr. van
- 9 Loben Sels.
- 10 I believe DWR and the State Water Contractors
- 11 had said you had no cross. Is that still the case?
- MS. MORRIS: (Nodding head.)
- 13 CO-HEARING OFFICER DODUC: All right. I have
- 14 County of San Joaquin for 10, Clifton Court for 10. I
- 15 don't see Miss Womack here.
- 16 Mr. Keeling, do you still wish to cross?
- 17 MR. KEELING: Most of my cross has been
- 18 eliminated by virtue of the rulings, but I have a
- 19 couple of questions and it will be very short.
- 20 CO-HEARING OFFICER DODUC: All right.
- So, after we're done, let's do a quick time
- 22 check and run down what I expect will happen the rest
- 23 of the day.
- 24 MR. KEELING: Tom Keeling for the San Joaquin
- 25 County Protestants.

- 1 My questions all have to do with
- 2 communications between the DWR and the tunnel
- 3 Proponents and organizations with which Mr. van Loben
- 4 Sels is connected in connection with the development
- 5 and preparation of the ADSEIR.
- 6 CO-HEARING OFFICER DODUC: And where is that
- 7 in his testimony?
- 8 MR. KEELING: On Page 1, he lists the
- 9 organizations to which he belongs. The -- His
- 10 testimony is all about the ADSEIR, at least in large
- 11 part about it.
- 12 And I want to know if he's been contacted
- 13 about these issues, such as transportation and
- 14 groundwater, in connection with the preparation of the
- 15 ADSEIR. Has there been any outreach to his
- 16 organizations?
- 17 CO-HEARING OFFICER DODUC: I don't see the
- 18 connection between all the organizations he listed. He
- 19 doesn't mention them in the context of the ADSEIR.
- MR. KEELING: Well, the testimony's about the
- 21 ADSEIR and I'm -- my objective is to find out if
- 22 there's been any attempt to outreach to the community
- 23 at all in preparing this ADSEIR.
- 24 CO-HEARING OFFICER DODUC: I'm sorry,
- 25 Mr. Keeling. I don't see anything -- unless you can

- 1 point me to, anything in his testimony regarding
- 2 outreach to his organization.
- 3 MR. KEELING: Exactly.
- 4 CO-HEARING OFFICER DODUC: There is nothing in
- 5 his testimony regarding outreach to his organization.
- 6 Therefore, your question to him regarding that would be
- 7 outside the scope.
- 8 MR. KEELING: Thank you.
- 9 CO-HEARING OFFICER DODUC: Then I guess you
- 10 have no redirect, Miss Meserve.
- MS. MESERVE: Okay.
- 12 CO-HEARING OFFICER DODUC: Thank you very
- 13 much, Mr. van Loben Sels.
- Do you wish to move your exhibits?
- 15 MS. MESERVE: Yes. I believe -- So I would be
- 16 moving LAND-305 and LAND-309 into evidence, and then --
- 17 That's the two exhibits.
- 18 CO-HEARING OFFICER DODUC: Yup.
- 19 Any objections?
- 20 And that would be 305 as corrected by our
- 21 ruling issued earlier today.
- MS. MESERVE: Yes.
- 23 Do you have any further instruction about how
- 24 you'd like to reflect that?
- 25 CO-HEARING OFFICER DODUC: I think we will --

- 1 Well, I've already done this right now on my computer.
- 2 Let me look to counsel. How would you like to
- 3 do this?
- 4 MR. DEERINGER: The Hearing Team can do the
- 5 strikeouts, and then if there are any corrections that
- 6 need to be made, we assume that you or other parties
- 7 will let us know.
- 8 MS. MESERVE: Yes, certainly.
- 9 CO-HEARING OFFICER DODUC: All right.
- 10 Miss Morris?
- 11 MS. MORRIS: Yes. I have an objection to the
- 12 exhibits on 309. In particular, there were two
- 13 exhibits that I wanted to object to. I can give you
- 14 the numbers in a second.
- One has to do with the Rosebud Ranchero (sic)
- 16 and the other has to do with the pumping capacity
- 17 which, again, were ruled out as part outside the scope.
- 18 So I would ask that those portions be
- 19 excerpted out of that comment letter.
- 20 And I can give those to you in five minutes.
- 21 CO-HEARING OFFICER DODUC: All right.
- MS. MESERVE: Yeah. I would object to
- 23 chopping up my exhibits. I believe that it is a
- 24 complete comment letter with attachments. And to the
- 25 extent there may be portions of it that aren't relevant

1 or were ruled outside of relevancy by the Hearing Team,

- 2 that would have to be -- that's already reflected in
- 3 the record.
- 4 CO-HEARING OFFICER DODUC: That was --
- 5 Miss Morris is saying that, because we ruled out those
- 6 portions from Mr. van Loben Sels' testimony, that
- 7 portion should also be ruled out from LAND-309.
- 8 MR. DEERINGER: That's how I understood it as
- 9 well.
- 10 MS. MESERVE: I'm saying I object to that. I
- 11 don't think it would be appropriate to chop up my
- 12 exhibit.
- 13 CO-HEARING OFFICER DODUC: Well, we are
- 14 chopping up your exhibits, Miss Meserve, in any case.
- Miss Morris, do you have those citations?
- 16 Well, as you're looking up those
- 17 citations . . .
- 18 (Pause in proceedings.)
- 19 MS. MORRIS: It's Exhibit 1 to LAND-309, which
- 20 is the MWD e-mail on capacity. It's the Exhibit 4 and
- 21 5, which are the exhibits that discuss the Rosebud
- 22 National Registry document, and Exhibit 5 is Rosebud
- 23 California Preservation Foundation award so . . .
- 24 CO-HEARING OFFICER MARCUS: So they're
- 25 separate exhibits to the exhibits.

- 1 CO-HEARING OFFICER DODUC: Okay. We will look
- 2 at those and make sure they're correct.
- 3 And with those the corrections, we will accept
- 4 Miss Meserve's exhibits into the record.
- 5 (The Environmental Justice Coalition for Water,
- 6 Islands, Inc., Local Agencies of the North Delta,
- 7 Bogle Vineyards/Delta Watershed Landowner Coalition,
- 8 Diablo Vineyards and Brad Lange/Delta Watershed
- 9 Landowner Coalition, Stillwater Orchards/Delta
- 10 Watershed Landowner Coalition, Brett G. Baker and
- 11 Daniel Wilson Exhibits 305 & 309 received in evidence)
- 12 CO-HEARING OFFICER DODUC: Thank you, Mr. van
- 13 Loben Sels.
- 14 WITNESS VAN LOBEN SELS: Thank you.
- 15 CO-HEARING OFFICER DODUC: All right. Let's
- 16 do some quick housekeeping/time check.
- I see Dr. Denton here. Welcome back,
- 18 Dr. Denton.
- I have roughly 90 minutes of cross for
- 20 Dr. Denton, so that should take us up to about the
- 21 4 o'clock hour.
- What I'm proposing is: We stay until 6:00
- 23 today in order to hear from Dr -- is it Jahn and
- 24 Dr. Williams.
- I don't know that we'll get through your cross

- 1 today because there's quite a bit of cross, including
- 2 60 minutes from the Department and State Water
- 3 Contractors. If we do not complete cross, then we will
- 4 ask you to return on Friday.
- 5 Miss Ansley.
- 6 MS. ANSLEY: Yes. I believe I can give a more
- 7 refined estimate of cross for Dr. Jahn and Dr. Williams
- 8 would be about probably 30 to 40 minutes at most.
- 9 CO-HEARING OFFICER DODUC: All right.
- 10 Miss Des Jardins.
- 11 MS. DES JARDINS: Yeah. Both of my witnesses
- 12 traveled very long distances.
- 13 CO-HEARING OFFICER DODUC: Which is why I am
- 14 accommodating them by making everyone stay until
- 15 6 o'clock --
- MS. DES JARDINS: Thank you.
- 17 CO-HEARING OFFICER DODUC: -- instead of
- 18 adjourning at 5:00.
- 19 MS. DES JARDINS: Thank you very much.
- 20 CO-HEARING OFFICER DODUC: And the Department
- 21 has revised their cross to 30 to 40 minutes.
- 22 The remainder cross-examinations are by LAND
- 23 for 15, the County of San Joaquin for 10, CSPA for 20,
- 24 and South Delta for 10.
- 25 Again, to the extent that we cannot complete

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1 it today, then these witnesses will have to return on
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- 2 Friday.
- 3 With that, I will ask Dr. Denton to come up.
- 4 Welcome back, Dr. Denton. You have already
- 5 taken the oath.

6

- 7 Richard Denton,
- 8 called as a witness by the Contra Costa
- 9 County and Contra Costa County Water
- 10 Agency and County of Solano, having
- 11 previously been duly sworn, was examined
- 12 and testified further as follows:
- 13 MR. WOLK: Good afternoon. Daniel Wolk on
- 14 behalf of Contra Costa County, Contra Costa County
- 15 Water Agency and Solano County, Group 25 Protestants.
- So I'm here, of course, with Dr. Richard
- 17 Denton. I think he's already been sworn in.
- 18 CO-HEARING OFFICER DODUC: All right. I
- 19 believe there are objections.
- Miss Morris.
- MS. MORRIS: Thank you.
- I have two objections as --
- 23 CO-HEARING OFFICER DODUC: Only two?
- MS. MORRIS: Yes. So I will be brief.
- 25 My objection is that the testimony on CC-71 --

- 1 and I'll give you all the lists -- that this testimony
- 2 is outside the scope of surrebuttal. This testimony
- 3 looks at a post-1995 analysis -- trend analysis.
- 4 When asked on cross-examination by --
- 5 Mr. Hutton was asked on cross-examination if he did
- 6 such analysis post-1995, and he answered no.
- 7 The following references are referring to a
- 8 trend analysis that is post-1995 and that is, again,
- 9 CCCC-71, Page 6, 25 -- Lines 25 through 28, Page 8,
- 10 Lines 4 through 8, Page 8, Lines 17 through 19, Page 9,
- 11 10 through 11, and Page 9 --
- 12 CO-HEARING OFFICER DODUC: I'm sorry. Page 9,
- 13 Line 10 through 11.
- 14 MS. MORRIS: Sorry. I got sloppy. My
- 15 apologies.
- 16 So Page 9, Lines 10 through 11, and Page 9,
- 17 Lines 20 through 22.
- 18 The second objection is that --
- 19 CO-HEARING OFFICER DODUC: Okay. Hold on.
- 20 Let me ask Mr. Wolk to respond before you move
- 21 on.
- MR. WOLK: Well, I think what Miss Morris gets
- 23 is actually the crux of Dr. Hutton's testimony that is
- 24 part of rebuttal, that is part of this surrebuttal,
- 25 were contradicting.

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1 He -- In fact, it's -- we even quote
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- 2 Dr. Hutton's testimony, his written testimony, on Page
- 3 4 of CCC-SC-71 in which he states explicitly (reading):
- 4 "The 2010 Flow Criteria Report and
- 5 the Phase II Scientific Basis Report
- 6 suggest that the magnitude and timing of
- 7 outflow has changed significantly over
- 8 time, as evidenced by the difference
- 9 between calculated unimpaired outflows
- 10 and actual outflows."
- 11 And the purpose of this surrebuttal is to
- 12 essentially say Dr. Hutton is incorrect in that
- 13 and . . .
- 14 CO-HEARING OFFICER DODUC: So, Miss Morris,
- 15 again, why do you believe this is outside the scope?
- MS. MORRIS: Again, specifically on
- 17 cross-examination -- It's supposed to be rebutting what
- 18 Dr. Hutton testified to.
- 19 Dr. Hutton did not do -- and he testified that
- 20 he did not do -- a post-1995 trend analysis. And all
- 21 the citations I cite to show a post-1995 trend
- 22 analysis.
- 23 If -- If they were alleging that he should
- 24 have done it, then that's different, but they're
- 25 actually just doing it and submitting it. So that's

- 1 the objection.
- 2 CO-HEARING OFFICER DODUC: But they're doing
- 3 it and presenting it to rebut his testimony.
- 4 MR. WOLK: She's actually making our argument
- 5 for us. That's precisely why we presented it in
- 6 surrebuttal.
- 7 CO-HEARING OFFICER DODUC: It is responsive,
- 8 Miss Morris.
- 9 MS. MORRIS: I -- If that's the ruling, that's
- 10 the ruling. I disagree. I don't think I made their
- 11 argument for them. That's not exactly what they said.
- 12 They actually did a different analysis so --
- 13 CO-HEARING OFFICER DODUC: In any case,
- 14 Miss Morris, the objection is overruled. It is
- 15 responsive to the testimony in rebuttal.
- MS. MORRIS: The --
- 17 CO-HEARING OFFICER DODUC: Next objection.
- 18 MS. MORRIS: The second objection is to the
- 19 testimony on Page 10, Line 8 through 22, Page --
- 20 CO-HEARING OFFICER DODUC: I'm sorry. Line 18
- 21 to 22.
- 22 MS. MORRIS: 8 to 22.
- 23 CO-HEARING OFFICER DODUC: Okay.
- MS. MORRIS: Page 9, Line 6 through 9;
- 25 CCC-SC-70, Slide 9; CCC-SC Exhibit 76.

1 And the entirety of these are showing analysis

- 2 for California WaterFix as well as Boundary 1 and
- 3 Boundary 2.
- 4 If you look at the references, again, those
- 5 are outside the scope of Mr. Hutton's testimony. He
- 6 did a -- He did not testify at all to WaterFix Project
- 7 operations but, rather, was looking at outflow trends
- 8 generally but not specific as to WaterFix.
- 9 And so these are outside the scope of the
- 10 rebuttal testimony provided by Mr. Hutton.
- 11 CO-HEARING OFFICER DODUC: Response, Mr. Wolk.
- MR. WOLK: Well, Dr. Hutton testified in
- 13 rebuttal. His testimony essentially contradicts the
- 14 2008 Biological Opinion. Of course, that has -- is
- 15 part of the CWF Operations Criteria.
- So, what this is intended to show is that,
- 17 well, Dr. Hutton is incorrect in -- in that -- that
- 18 what he presented for rebuttal and the arguments that
- 19 he makes for rebuttal are -- are ones that -- that --
- 20 that -- We would just essentially like to show that the
- 21 CWF modeling with and without the Fall X2 show similar
- 22 trends in the Delta outflow during the fall, which
- 23 he -- You know, he contradicts that as part of his
- 24 rebuttal testimony, if that makes sense.
- I can have Dr. Dutton explain.

- 1 CO-HEARING OFFICER DODUC: Please do.
- 2 (Laughter.)
- 3 WITNESS DENTON: Well, another way of looking
- 4 at this is, the purpose of Dr. Hutton's testimony, from
- 5 my reading of it, is to suggest that the Biological
- 6 Opinions which form the basis of the Operating Criteria
- 7 for WaterFix are wrong and there's no need for Fall X2
- 8 limits.
- 9 CO-HEARING OFFICER DODUC: Um-hmm.
- 10 WITNESS DENTON: So what I'm trying to show is
- 11 that this then feeds back into this. There have been
- 12 problems with the Fall X2, that it has gotten worse
- 13 after 1995.
- 14 And if the Project -- the WaterFix Project
- 15 were allowed to operate without a Fall X2, then we
- 16 would end up with -- as shown in that figure -- or in
- 17 Exhibit 76, you can see that the Project would be
- 18 operating to minimal outflows, even in wet years, of
- 19 4,000 when historically -- and this is what Dr. Hutton
- 20 was looking at -- historically, the outflows were much
- 21 higher and would be much higher, for instance, in a
- 22 WaterFix Project that had a Fall X2.
- 23 And then the argument is that Dr. Hutton
- 24 didn't get into that kind of detail about WaterFix.
- 25 Then why was his testimony there? Because there's no

- 1 point in having and testimony, unless it's related back
- 2 to the WaterFix Project. And I'm just trying to limit
- 3 my testimony back to the WaterFix Project.
- 4 CO-HEARING OFFICER DODUC: Miss Morris.
- 5 MS. MORRIS: I think that counsel and the
- 6 witness were inferring things that were not part of
- 7 Mr. Hutton's rebuttal testimony, specifically that that
- 8 testimony was responding to new analysis that had been
- 9 done on the outflow criter -- on outflow since 2010 in
- 10 the Flow Criteria Report.
- 11 Nothing in his testimony talked about
- 12 Boundary 1. Boundary 1 has been part of this hearing
- 13 since Part 1. If these -- If this Protestant wanted to
- 14 make this analysis, they could have easily put it in.
- 15 But he wasn't looking at this in that context and for a
- 16 good reason, because it's not the point. The point was
- 17 that he is responding to new published studies since
- 18 2010 that have to do with outflow, not WaterFix
- 19 Project.
- 20 CO-HEARING OFFICER DODUC: I understand that
- 21 your witness -- or at least the Department's witness --
- 22 did not look at those issues, but Dr. Dutton, as I
- 23 understand it, is looking at that issue in order to
- 24 respond to the testimony received during rebuttal.
- 25 So it is responsive. Objection is overruled.

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1 All right. Not seeing any other objections,
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- 2 Mr. Wolk --
- 3 MR. WOLK: Thank you --
- 4 CO-HEARING OFFICER DODUC: -- you may begin.
- 5 MR. WOLK: -- Chair Doduc.
- 6 DIRECT EXAMINATION BY
- 7 MR. WOLK: So, Dr. Denton, has your Statement
- 8 of Qualifications been submitted into evidence as
- 9 CCC-SC-2?
- 10 WITNESS DENTON: Yes, it has.
- 11 MR. WOLK: And is Exhibit CCC-SC-70 a true and
- 12 correct copy of the PowerPoint presentation you will
- 13 use today to summarize your Part 2 surrebuttal
- 14 testimony?
- 15 WITNESS DENTON: Yes, it is.
- 16 MR. WOLK: Is Exhibit CCC-SC-71 a true and
- 17 correct copy of your Part 2 surrebuttal testimony?
- 18 WITNESS DENTON: Yes, it is.
- 19 MR. WOLK: Lastly, are Exhibits CCC-SC-72
- 20 through -76 true and correct copies of those exhibits?
- 21 WITNESS DENTON: Yes.
- MR. WOLK: Okay. Thank you, Dr. Denton.
- 23 Please proceed to summarize your Part 2
- 24 surrebuttal testimony.
- 25 WITNESS DENTON: Mr. Hunt, would you bring up

- 1 my PowerPoint, please.
- 2 (Exhibit displayed on screen.)
- 3 WITNESS DENTON: Thank you very much.
- 4 So Co-Chairs Doduc, Marcus, Members of the
- 5 Board.
- 6 I'm appearing today -- My name is Richard --
- 7 Dr. Richard Denton. I'm appearing as a witness for the
- 8 Contra Costa County and Solano County.
- 9 And my rebuttal testimony is responding to
- 10 Dr. Hutton's -- my surrebuttal testimony is responding
- 11 to Dr. Hutton's rebuttal testimony on historic trends
- 12 in Delta outflow and Fall X2 that he -- is in his
- 13 Exhibit DWR-1224.
- 14 If I can have the next slide, please.
- 15 (Exhibit displayed on screen.)
- 16 WITNESS DENTON: So Dr. Hutton criticized the
- 17 findings in the 2010 Delta Flow Criteria Report and
- 18 Phase II Scientific Report specifically that there have
- 19 been changes in the Delta outflow and Fall X2.
- 20 He opined that, in fact, there were no
- 21 statistically significant long-term trends in Delta
- 22 outflow and no long-term increasing trend in Fall X2.
- 23 So he was contradicting what was in the -- the reports.
- 24 His analysis for time series didn't really
- 25 take into account the water year variations within that

- 1 time series, and in so doing, masks some of the recent
- 2 trends and fall outflow and Fall X2. And we've already
- 3 started discussing the idea of 1995.
- 4 Prior to 1995, there were -- As I recall,
- 5 there was -- is it five -- Yeah. There was five
- 6 critical years and two dry years. And then after --
- 7 From 1995 onwards, there was five wet years and one
- 8 above-normal year. So there really was a binomial
- 9 shift in the water -- runoff -- unimpaired runoff.
- 10 And so something like that, if we just tried
- 11 to do a long-term time series, you would have that --
- 12 you'd be masking that particular change.
- So, what I feel is, it's important to look at
- 14 the historical data as a function of the water
- 15 year-type so that you're actually taking into account
- 16 what is happening in wet years, what is happening in
- 17 dry years. And can you find an effect that is
- 18 happening in, say, wet years that may have changed over
- 19 time?
- Next slide, please.
- 21 (Exhibit displayed on screen.)
- 22 WITNESS DENTON: The first thing I'll look at
- 23 is the Delta outflow and then, later, I'll look at the
- 24 corresponding X2 where they are somewhat related.
- 25 So if you look at the September Delta outflow,

- 1 what I've done is taken the historical data from
- 2 Dayflow and I've plotted against the Sacramento
- 3 40-30-30 Index. That is the indicator of water
- 4 year-type that is used to -- by the CVP and the State
- 5 Water Project to determine operations and, in
- 6 interpreting D-1641, there are different standards
- 7 depending on what the water year-type is.
- 8 And what I've also done is broken up the
- 9 years, so I'm also looking at trends with respect to
- 10 time but doing it in terms of categorizing into
- 11 different periods.
- 12 Dr. Hutton looked at a longer period of
- 13 record, so he went from 1922 through, I think, 2016 and
- 14 broke it at 1986 because that was -- 1968 because that
- 15 was the time when the State Water Project came online.
- 16 So I'm basically following the same approach
- 17 as he did, that the yellow triangles are the period
- 18 1956, which is out of the Dayflow data historical
- 19 estimates of outflow. That starts in September 1956.
- 20 And I go through to 1967 is the first period
- 21 that I've categorized, and that's the yellow triangles.
- The next period is from 1968 through 1994 and
- 23 that's the blue circles.
- 24 And then I considered that there has been a
- 25 change in Delta operations in 1995 as a result of the

- 1 agreements made through the Bay-Delta Accord,
- 2 encapsulated into the 1995 Water Quality Control Plan,
- 3 and then later implemented through D-1641.
- 4 And it's not just the Spring X2. That is a
- 5 key factor that was implemented in the site being
- 6 voluntarily operated to in Spring X -- sorry -- in
- 7 1995, but there are also other things like EI ratios,
- 8 et cetera, that were included.
- 9 So that, to me, is a break point that you
- 10 would expect to see some changes at that point.
- 11 And, then, in 2008-2009, we had new OCAP
- 12 Biological Opinions, and they brought an -- additional
- 13 things, including the Fall X2 but also brought in
- 14 requirements for the ratio of Vernalis inflow to South
- 15 Delta exports, et cetera. So there were standards or
- 16 Operating Criteria introduced about that time.
- 17 So we're trying to look at what has changed in
- 18 that time.
- 19 And, so, if you look of this graph here --
- 20 this plot here, you can see that the red triangles
- 21 which represent the period after 1995 -- or '95 onwards
- 22 are much lower. The outflows are much lower in the
- 23 fall.
- 24 And this is a little bit curious because the
- 25 whole idea of the Spring X2 was to increase flows and,

- 1 therefore, improve X2 in the spring months. But there
- 2 seems to be an effect as an unintended consequence of
- 3 moving that effect into the fall.
- 4 Then we'd like to be able to look at, then --
- 5 see if the Biological Opinions have done anything. And
- 6 those are the green squares.
- 7 As Dr. Hutton pointed out in his testimony,
- 8 there's -- really the only test of Fall X2 would have
- 9 been in 2011 and 2017.
- 10 In 2011, Reclamation wanted to relax the
- 11 standards but they were met naturally, so they would
- 12 sort of correspond to what you'd expect to find if
- 13 Fall X2 was in effect.
- In 2017, there was a request for relaxation of
- 15 the standard in October.
- 16 This -- This is a plot for December -- for
- 17 September, but it seems like, even there, that the flow
- 18 is -- Well, actually, that is consistent with Fall X2
- 19 because to meet Fall X2 in the wet -- in a wet year,
- 20 you have to get an outflow of about 11,000 so it is
- 21 consistent.
- Next slide, please.
- 23 (Exhibit displayed on screen.)
- 24 WITNESS DENTON: So I think the October plots
- 25 are much more dramatic. And it does show that, if

- 1 you're looking for trends in Delta outflow, then there
- 2 is an effect that occurred after 1995 in the month of
- 3 October where you're basically -- in most cases, you
- 4 start to flatline the outflow.
- 5 So even in a wet year, admittedly the State
- 6 Board and D-1641, that's their minimum outflow
- 7 requirements, so no one's breaking the law here.
- 8 But prior to that, in the previous trends
- 9 that -- were that in wet years and above-normal years,
- 10 you got much higher flows in October than just the bare
- 11 minimum.
- 12 Next slide, please.
- 13 (Exhibit displayed on screen.)
- 14 WITNESS DENTON: And this is a plot of a
- 15 spring month. The Spring X2 applies from February
- 16 through June, and this is just for the month of April.
- 17 And you can -- if you look at the red
- 18 triangles, you don't see any actual improvement in
- 19 outflow as a result of this Spring X2 requirement.
- 20 And there's a -- Well, I'd better not go
- 21 there. I was going to do an aside but I won't do an
- 22 aside.
- Next slide.
- 24 (Exhibit displayed on screen.)
- 25 WITNESS DENTON: And this one, I really just

- 1 put in there because Dr. Hutton did actually do some
- 2 normalization of outflows by dividing by the -- in this
- 3 case the Eight-River Index.
- In this case, I've divided by the unimpaired
- 5 flow just so it's a little bit more consistent what
- 6 the -- what the State Board is considering doing
- 7 through its update of the Water Quality Control Plan.
- 8 And there does indeed in this case -- Once the
- 9 State Water Project comes online and the blue dots
- 10 start at that point in 1968, there does seem to be a
- 11 decrease in outflow as a percentage of unimpaired flow
- 12 but, as in the case of Dr. Hutton's testimony, that's
- 13 not necessarily a statistically significant trend but,
- 14 to the eye, it looks significant.
- Next slide, please.
- 16 (Exhibit displayed on screen.)
- 17 WITNESS DENTON: So the next slide -- series
- 18 of slides are just plotting September X2 instead of
- 19 outflow.
- 20 And in my case, the X2 values were calculated
- 21 from the current monthly outflow -- or the current
- 22 daily outflows and the previous outflows through the
- 23 Kimmerer-Monismith equation.
- In the case of Dr. Hutton's testimony, he
- 25 calculated X2 from actual salinity measurements in the

- 1 Delta rather than from that equation.
- 2 And looking back at some of his papers that
- 3 are in the exhibits there, there are differences in the
- 4 X2 calculations, but they're somewhat similar.
- 5 So this -- This is a plot, then, of the X2
- 6 from Dayflow calculated from outflow values.
- 7 And, again, in September, there is this much
- 8 higher X2 values represented by a reduction in outflow.
- 9 They're not as significant as --
- 10 Maybe if we could go to the next slide.
- 11 (Exhibit displayed on screen.)
- 12 WITNESS DENTON: This is the slide for
- 13 October. And you can see very significant changes in
- 14 Fall X2 -- sorry -- October X2 after 1995.
- 15 And in my earlier testimony and other
- 16 testimony, people have likened this to be the wet years
- 17 are starting to primary like dry years and Dr. Hutton
- 18 pointed out and was concerned about that statement.
- 19 But if you look at that there, there is very
- 20 high Fall X2s in wet years that are well above what
- 21 they had been previously in previous years prior to
- 22 1995.
- 23 And this particular graph has superimposed on
- 24 it the Fall X2 limits that are in the Biological
- 25 Opinion, the U.S. Fish and Wildlife 2008 Biological

1 Opinion, and also in the State Board's own Delta Flow

- 2 Criteria Report.
- 3 And you can see that, previously, essentially
- 4 all those data points were actually below the Fall X2
- 5 in the wet years, on the right-hand side of the graph,
- 6 except for the ones that are obviously there, 1997,
- 7 2006 and the others. So there is something that
- 8 happened after 1995.
- 9 And then one thing that Dr. Hutton said in his
- 10 testimony, which was alluded to through the objection,
- 11 that his breakdown -- If he was breaking up the periods
- 12 after 1968, he said in his cross-examination by
- 13 Mr. Wolk that he chose 2000 -- the year 2000 because
- 14 that's when the pelagic organism decline occurred.
- But, of course, there are reasons that that
- 16 pelagic organism decline occurred, and they would have
- 17 happened prior to 2000.
- 18 Next slide, please.
- 19 (Exhibit displayed on screen.)
- 20 WITNESS DENTON: And so this one is just
- 21 really just showing you how this all ties in to what's
- 22 happening with the CWF -- the WaterFix Project itself.
- 23 You will have options when you're considering
- 24 permit terms. Will you accept the Project as
- 25 represented by -- the Project that was presented in

1 Part 2 Rebuttal, in other words, CWF H3+? That was the

- 2 Adopted Project by DWR coming out of the Final EIR.
- 3 And those are the green dots.
- 4 Or will you agree that it would be okay to --
- 5 for -- through adaptive management to change the
- 6 Project over time to something closer to Boundary 1
- 7 which doesn't include Fall X2?
- 8 Which what you would see there is drops the
- 9 outflows, instead of being 10,000, about 10,000 in wet
- 10 years, it'll drop down to 4,000 which will have effects
- 11 if you follow the logic in the Biological Opinions of
- 12 impacting the Delta ecosystem and also has effects on
- 13 Delta water quality, which is a concern to the parties
- 14 I represent.
- Next slide, please.
- 16 (Exhibit displayed on screen.)
- 17 WITNESS DENTON: So my conclusions are that
- 18 the plots of Delta outflow, we plot them as a function
- 19 of Water Year Index. They do show recent trends in --
- 20 over time in the fall, that the fall Delta outflows
- 21 reduced substantially after 1995, which coincided with
- 22 the implementation of the Spring X2.
- 23 This appears -- It could well be an unintended
- 24 consequence of setting a standard for the spring but
- 25 not simultaneously protecting subsequent months after

- 1 that.
- 2 Then if you -- The plots -- The plots of X2,
- 3 as a function of Water Year Index, also show that there
- 4 are these changes in increase in Fall X2 during the
- 5 14-year period, the weaker effects in September but
- 6 very strong effects in the October X2 plot.
- 7 And as Dr. Hutton pointed out in his
- 8 testimony, since 2008, even though Fall X2 has
- 9 theoretically been in effect, it really hasn't been
- 10 tested. So we really don't know whether that's having
- 11 effect so far.
- 12 If we do have -- Well, the idea is to -- that
- 13 we really need Fall X2 limits so that we do avoid a
- 14 repeat of what happened in 1995, or post-1995. If that
- 15 is included as a permit term in the WaterFix Project,
- 16 then that will help the Delta ecosystem and help
- 17 improve Delta water quality or maintain good water
- 18 quality.
- 19 Thank you very much.
- 20 CO-HEARING OFFICER DODUC: Thank you,
- 21 Dr. Denton.
- The cross I have for you are joint DWR/State
- 23 Water Contractors for 30, LAND for 13, Mr. Ruiz for 10
- 24 to 15, and CSPA for 20.

25

- 1 CROSS-EXAMINATION BY
- MS. MORRIS: Good afternoon, Dr. Denton.
- 3 WITNESS DENTON: Yes. Good afternoon.
- 4 MS. MORRIS: I have a couple questions for
- 5 you.
- 6 The Dayflow data goes back to Water Year 1930;
- 7 correct?
- 8 WITNESS DENTON: The Dayflow? 1955.
- 9 MS. MORRIS: So it's your testimony that
- 10 there's no Dayflow data prior to 1955?
- 11 WITNESS DENTON: Well, the Dayflow data that I
- 12 dealt with was in 19 -- started in 1955.
- MS. MORRIS: But there is Dayflow data back to
- 14 Water Year 1930; isn't there?
- 15 WITNESS DENTON: Yeah, I think you're right.
- 16 There's some data that I think the IDP was not sort
- 17 of -- they're not sure how accurate it was but it was
- 18 made available on the wet side.
- 19 MS. MORRIS: If you were conducting a
- 20 historical trend analysis, would you include future
- 21 not-yet-built infrastructure and a historical trend
- 22 analysis?
- 23 WITNESS DENTON: Yes. I wouldn't have the
- 24 data because it's not -- the flow data or the estimates
- 25 of flow data because it's not yet built.

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1 In terms of Dayflow?
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- 2 MS. MORRIS: If you could pull up, Mr. Hunt,
- 3 DWR-1426.
- 4 It's on the flash drive.
- 5 (Exhibit displayed on screen.)
- 6 MS. MORRIS: And if you could first show the
- 7 cover page.
- 8 (Exhibit displayed on screen.)
- 9 MS. MORRIS: This is the Water Quality Control
- 10 Plan for salinity for the San Francisco
- 11 Bay/Sacramento-San Joaquin Delta Estuary from May 1991.
- 12 Are you familiar with this document?
- 13 WITNESS DENTON: I used to work with that back
- 14 when it was essentially the current document but I
- 15 haven't looked at at for a long time.
- 16 MS. MORRIS: Okay. Could you turn to Page 3-1
- 17 of this exhibit, please.
- 18 CO-HEARING OFFICER DODUC: Do you happen to
- 19 know the .pdf number?
- 20 MS. MORRIS: I apologize. I don't. It might
- 21 be 181 but I would be guessing. We can try it.
- 22 (Exhibit displayed on screen.)
- MS. MORRIS: Nope. I'm very wrong.
- Okay. I want to ask you -- And maybe I --
- 25 I'll -- We can reference this, if need be, but maybe

- 1 working back reference this.
- 2 Isn't it true that the 40-30-30 Index
- 3 considers water availability from storage facilities as
- 4 well as seasonal runoff?
- 5 WITNESS DENTON: Yes. Yes. It's 30 percent.
- 6 MS. MORRIS: And you developed -- And you used
- 7 the 40-30-30 Index to develop your opinions for this
- 8 surrebuttal testimony; correct?
- 9 WITNESS DENTON: Yes, I did.
- 10 MS. MORRIS: On Page 6 of your testimony,
- 11 CCC-SC-71, you state that you selected the time
- 12 period --
- 13 (Exhibit displayed on screen.)
- MS. MORRIS: -- 1995 through 2008 because it
- 15 was after the Bay-Delta Accord; correct?
- 16 WITNESS DENTON: Yes.
- 17 MS. MORRIS: And the Bay-Delta Accord included
- 18 a Spring X2 standard; correct?
- 19 WITNESS DENTON: Yes.
- 20 MS. MORRIS: And meeting that standard may
- 21 require making releases from storage; correct?
- 22 WITNESS DENTON: Yes.
- MS. MORRIS: And the Spring X2 standard is
- 24 from February to June; correct?
- 25 WITNESS DENTON: Yes.

1 MS. MORRIS: But you don't show May and June

- 2 in your graphs; correct?
- 3 WITNESS DENTON: I -- I showed an April graph
- 4 just to show that there wasn't a trend. So it wasn't
- 5 really helpful, at least in showing the changes,
- 6 because there was no change.
- 7 MR. WOLK: Right. But you don't have graphs
- 8 for May or June.
- 9 WITNESS DENTON: No, I don't. Well, not in my
- 10 testimony. I have them.
- 11 MS. MORRIS: Right.
- 12 In reaching your conclusions in your testimony
- 13 regarding trends, did you conduct a statistical
- 14 analysis to determine if the trend was statistically
- 15 significant.
- 16 WITNESS DENTON: In terms of my plot, say, of
- 17 October X2 versus 40-30-30, I'm not even sure actually
- 18 how I would do that.
- 19 I mean, if it's just an X-Y plot, you can use
- 20 linear regression. And I think I did do a -- I did a
- 21 plot earlier there that I put up about outflow divided
- 22 by unimpaired flow, and I did do a linear regression of
- 23 that, and it was .26 or something so it wasn't
- 24 significant.
- 25 But it -- With respect to the plot of October

1 X2, it's really just something you see visually. It's

- 2 a huge change.
- 3 MS. MORRIS: So that was a "no" as to the
- 4 October.
- 5 And I think I heard you testify to that
- 6 earlier, that it was just something you looked at but
- 7 it wasn't statistically significant.
- 8 WITNESS DENTON: That was with respect to the
- 9 outflow divided by unimpaired flow graph.
- 10 MS. MORRIS: Okay. Were the State Water
- 11 Project and the CVP Projects operating in the 1920s?
- 12 WITNESS DENTON: Oh, yeah. I think the CVP
- 13 started about 1940, which was the Contra Costa Canal.
- MS. MORRIS: So "no." Is that your answer?
- 15 WITNESS DENTON: About the 1930s.
- 16 MS. MORRIS: Okay. Great. That's -- That was
- 17 my question. Thank you.
- 18 So a 1920 level of development is
- 19 representative of a pre-Project condition; correct?
- 20 CO-HEARING OFFICER DODUC: The --
- 21 WITNESS DENTON: Let's do --
- 22 CO-HEARING OFFICER DODUC: I'm sorry.
- 23 WITNESS DENTON: That's a different question;
- 24 isn't it?
- 25 CO-HEARING OFFICER DODUC: "Pre-Project"

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1 meaning?
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- 2 MS. MORRIS: CVP/SWP pre-Project.
- 3 CO-HEARING OFFICER DODUC: Okay.
- 4 WITNESS DENTON: But doesn't that also mean
- 5 demands, the farmers' irrigation demands, and changes
- 6 in habitat and forestation, things like that?
- 7 Usually when you're doing level of
- 8 development, you go back to talking about demands and
- 9 what other diversions or losses there are.
- 10 MS. MORRIS: Right.
- 11 So if we're looking at the 1920s when the
- 12 State Water Project and CVP Projects are not online --
- 13 WITNESS DENTON: Right.
- MS. MORRIS: -- that would be representative
- 15 of a pre-Project condition; correct?
- 16 WITNESS DENTON: Or -- Yeah. Non -- Non-CVP,
- 17 non-SWP, is about as much as you can say.
- 18 MS. MORRIS: Okay. Great.
- 19 So looking at DWR-1224-Revised, Page 25, and
- 20 Figure 15.
- 21 I'll wait till it gets up on the screen.
- 22 (Exhibit displayed on screen.)
- MS. MORRIS: So it's actually Page 25.
- 24 I -- I apparently need to work on my number
- 25 enunciation. I'm learning that today.

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1 (Exhibit displayed on screen.)
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- MS. MORRIS: Thank you.
- 3 And then if you could scroll up.
- 4 (Exhibit displayed on screen.)
- 5 MS. MORRIS: This is from Dr. Hutton's
- 6 testimony.
- 7 And I want to ask you a question: If I could
- 8 focus your attention on the top right column.
- 9 And it's really difficult to see on the screen
- 10 actually. Would you like to come look at this one,
- 11 because you can actually see the gray on the lines.
- 12 WITNESS DENTON: I have a printout here but
- 13 even that's light.
- MS. MORRIS: It's -- It's much clearer on the
- 15 screen if you want to come. I'll -- I'll give you this
- 16 chair.
- 17 WITNESS DENTON: That's okay. I think I can
- 18 see it --
- 19 MS. MORRIS: Okay.
- 20 WITNESS DENTON: -- especially I can see the
- 21 gray lines.
- MS. MORRIS: So the top figure is the
- 23 historical 2000 to 2009 period; correct?
- 24 WITNESS DENTON: Correct.
- MS. MORRIS: And in this figure, the black

- 1 dots, which are easy to see, represent the actual
- 2 historic salinity; correct?
- 3 WITNESS DENTON: It's the X2, yes, calculated
- 4 Dr. Hutton's way, but it's essentially the same data.
- 5 MS. MORRIS: So those are the actual observed,
- 6 not -- correct? The black dots are the historic
- 7 salinity.
- And the gray dots are the modeled salinity;
- 9 correct?
- 10 They're very difficult to see.
- 11 WITNESS DENTON: Right, yes.
- MS. MORRIS: And there's also a gray line
- 13 which, on these screens, is barely -- barely visible
- 14 but you can see that on your copy?
- 15 WITNESS DENTON: Yes.
- MS. MORRIS: Okay. And the gray dots are
- 17 modeled salinity for years 2000 to 2009 but at the 1920
- 18 level of development; correct?
- 19 WITNESS DENTON: 1920 level data, yes.
- 20 So I assume that X mode State Water Project
- 21 both CVP and upstream diversions relative to 1920.
- MS. MORRIS: Great.
- 23 And in this figure, do you see that the black
- 24 historical dots are similar in magnitude to the gray
- 25 1920 level of development dots?

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1 (Pause in proceedings.)
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- 2 WITNESS DENTON: This is my eyesight.
- 3 But on the right-hand side, the last two,
- 4 there seems to be 1920 dots are below the actual ones.
- 5 MS. MORRIS: But, other than that, they're
- 6 generally similar; correct?
- 7 WITNESS DENTON: Same location, yes.
- 8 MS. MORRIS: And in this figure, do you see
- 9 that the slope of the black and gray lots are similar?
- 10 It's hard to see the line but --
- 11 WITNESS DENTON: Sure.
- MS. MORRIS: You can see the --
- 13 WITNESS DENTON: Which is similar to the --
- 14 the way I was plotting it. You get a similar-looking
- 15 data.
- 16 MS. MORRIS: Okay. Was that a yes, you agree
- 17 the slope is similar?
- 18 WITNESS DENTON: Yes.
- MS. MORRIS: Doesn't this suggest that the
- 20 lack of X2 variability in October is due to factors
- 21 other than the State Water Project and CVP Project
- 22 operations since the Projects were not online under the
- 23 1920 level of development?
- 24 WITNESS DENTON: I didn't go into how
- 25 Dr. Hutton developed those data so I'm really not sure

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1 whether I agree with the gray dots, for instance. So
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- 2 it's hard to tell from that point of view, but . . .
- 3 And, also, in my testimony, I didn't
- 4 necessarily say it was the full call of the State Water
- 5 Project and the CVP. I just said it seemed to occur
- 6 after 1995.
- 7 So, yeah, I'm not -- not blaming the State
- 8 Water Project and the CVP. It could be that rice
- 9 farmers started doing something at that same time.
- 10 MS. MORRIS: Okay. And --
- 11 WITNESS DENTON: But there definitely was a
- 12 trend is what my point is.
- 13 MS. MORRIS: Okay. And I just want to
- 14 be . . .
- Well, I think that's good.
- I don't have any further questions. Thank
- 17 you.
- 18 CO-HEARING OFFICER DODUC: Thank you,
- 19 Miss Morris.
- Miss Meserve.
- MS. MESERVE: No questions.
- 22 CO-HEARING OFFICER DODUC: Mr. Ruiz.
- 23 And then Mr. Shutes. Are you filling in for
- 24 Mr. Jackson?
- MR. SHUTES: We won't have any questions.

- 1 Thank you.
- 2 CO-HEARING OFFICER DODUC: Oh, okay. Thank
- 3 you. Then Mr. Ruiz.
- 4 CROSS-EXAMINATION BY
- 5 MR. RUIZ: Good afternoon, Dr. Denton. Just a
- 6 few questions, about probably five minutes.
- 7 In your conclusion slide, which I think it was
- 8 CCC-SC-70, just to be clear:
- 9 It's -- It's your opinion that there's
- 10 a clear increase in X2 from your 1995 and 2008 period;
- 11 correct?
- 12 WITNESS DENTON: Correct, yeah.
- 13 MR. RUIZ: You said that the increase -- I
- 14 believe you said it was less pronounced during
- 15 September as compared to October during that time
- 16 period; is that right?
- 17 WITNESS DENTON: Yes.
- 18 MR. RUIZ: Do you have an opinion as to why
- 19 that would be the case?
- 20 WITNESS DENTON: I haven't really gone into
- 21 detail, but what I was thinking about when I was
- 22 working on those graphs is that, in the outflow data,
- 23 you don't see that distinct change from September to
- 24 October. But when you look at it in terms of X2, there
- 25 seems to be a -- October X2 is a big change in X2.

- 1 And it may just be that cumulative effect of
- 2 Delta outflow. You've got a reduction in September,
- 3 then you have another reduction in October. And the
- 4 combination of those two reductions really kicked up
- 5 Fall X2, making it larger in October relative to
- 6 September.
- 7 MR. RUIZ: Thank you.
- 8 And if this Board were to approve the -- this
- 9 Change Petition -- as incomprehensible as that may be
- 10 to many of us -- it's your position that Fall X2 must
- 11 be -- should be a condition of that approval; correct?
- 12 WITNESS DENTON: Yes.
- 13 MR. RUIZ: Okay. What is -- Same question
- 14 with regard to Spring X2.
- 15 WITNESS DENTON: The -- The current
- 16 Spring X2, or the new spring outflow requirements?
- 17 MR. RUIZ: Well, either.
- 18 WITNESS DENTON: Yes. Spring X2 should
- 19 remain.
- 20 And then we have an enhancement being
- 21 suggested or being implied in what is the March, April
- 22 and May as part of the Project -- new Project criteria.
- 23 But I'm not sure what effect those will have.
- 24 MR. RUIZ: Okay. Thank you.
- No further questions.

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1 CO-HEARING OFFICER DODUC: So, Mr. Wolk,
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- 2 should I consider Dr. Denton's response as being
- 3 proposed criteria from Contra Costa?
- 4 (Laughter.)
- 5 WITNESS DENTON: We have a long list.
- 6 MR. WOLK: Yeah. A little bit.
- 7 CO-HEARING OFFICER DODUC: Any redirect?
- 8 MR. WOLK: None from the cross.
- 9 CO-HEARING OFFICER DODUC: All right. Thank
- 10 you, Dr. Denton.
- 11 At this point, do you wish to move your
- 12 exhibits into the record?
- 13 MR. WOLK: That's correct, Chair Doduc.
- We're going to ask that the Exhibits CCC-SC-70
- 15 through -76 be moved into the record.
- 16 CO-HEARING OFFICER DODUC: Any objections?
- Not hearing any, they are accepted.
- 18 (Contra Costa County and Contra Costa County Water
- 19 Agency and County of Solano Exhibits 70-76 received in
- 20 evidence)
- 21 CO-HEARING OFFICER DODUC: Thank you,
- 22 Dr. Denton.
- Thank you, Mr. Wolk.
- 24 All right. Candace, do you need a short
- 25 break?

- 1 THE REPORTER: Not yet.
- 2 CO-HEARING OFFICER DODUC: Does anyone need a
- 3 short break?
- 4 If not, we will follow through and ask
- 5 Miss Des Jardins to bring her witnesses up.
- 6 And perhaps Miss Des Jardins could also
- 7 clarify, because all the files that were uploaded to
- 8 the FTP site were uploaded into the DDJ folder. I and,
- 9 I believe, the Hearing Team's staff's interpretation
- 10 was that this was a DDJ panel, but I'm now to
- 11 understand that it's a joint DDJ-PCFFA panel.
- MS. DES JARDINS: PCFFA, I consulted with them
- 13 because Dr. Jahn's testimony is about Salmon, and I've
- 14 been working with them. And PCFFA requested to present
- 15 Dr. Jahn's testimony as well. Dr. Jahn's testimony has
- 16 both myself and Steve Volker representing --
- 17 CO-HEARING OFFICER DODUC: Good.
- MS. DES JARDINS: -- PCFFA.
- 19 CO-HEARING OFFICER DODUC: That's fine. I'm
- 20 not -- I'm not objecting -- I guess I can't object.
- 21 (Laughter.)
- 22 CO-HEARING OFFICER MARCUS: You want to
- 23 but . . .
- 24 CO-HEARING OFFICER DODUC: I just want a
- 25 clarification --

- 1 MS. DES JARDINS: Yeah.
- 2 CO-HEARING OFFICER DODUC: -- so we --
- 3 MS. DES JARDINS: Yeah. So -- So -- So one of
- 4 the witnesses is Dr. Andrew Jahn --
- 5 CO-HEARING OFFICER DODUC: Okay.
- 6 MS. DES JARDINS: -- who's presenting on
- 7 Salmon.
- 8 CO-HEARING OFFICER DODUC: Okay. So this is a
- 9 surrebuttal by the parties DDJ and PCFFA.
- 10 Thank you. I just wanted to get that clear.
- 11 MS. DES JARDINS: Except Dr. Williams is only
- 12 represented by -- by DDJ.
- 13 CO-HEARING OFFICER DODUC: Yes.
- MS. MESERVE: Just to be clear, we never
- 15 uploaded to two different FTP sites. We were told not
- 16 to do that, so we always just uploaded to one FTP --
- 17 CO-HEARING OFFICER DODUC: I'm not saying it's
- 18 wrong. I just wanted to get it clear who is being
- 19 represented on this panel.
- 20 Because if you notice on the chart that the
- 21 staff sent out on the Order of Presentation, we only
- 22 had DDJ classified and it should be DDJ and PCFFA.
- 23 (Pause in proceedings.)
- 24 CO-HEARING OFFICER DODUC: And I believe
- 25 someone needs to take the oath?

- 1 MS. DES JARDINS: Yes. Dr. Jahn does.
- 2 CO-HEARING OFFICER DODUC: If you could please
- 3 stand and raise your right hand.
- 4 You may do it, too, Dr. Williams.

5

- 6 ANDREW JAHN
- 7 and
- 8 CLYDE THOMAS WILLIAMS
- 9 called as witnesses for the California Water Research
- 10 and Pacific Coast Federation of Fishermen's
- 11 Association's and Institute for Fisheries Resources',
- 12 having been first duly sworn, were examined and
- 13 testified as follows:
- 14 CO-HEARING OFFICER DODUC: Thank you very
- 15 much. Be seated.
- 16 And before they begin, are there any
- 17 objections?
- 18 Wow. Hurry. Begin, quickly.
- 19 MS. DES JARDINS: Okay.
- 20 DIRECT EXAMINATION BY
- 21 MS. DES JARDINS: Dr. Jahn, is --
- 22 CO-HEARING OFFICER DODUC: I'm sorry. How do
- 23 we pronounce your last name?
- 24 WITNESS JAHN: I pronounce it John (phonetic).
- 25 CO-HEARING OFFICER DODUC: John. Okay.

- 1 Dr. Jahn.
- MS. DES JARDINS: Is Exhibit DDJ-330 a true
- 3 and correct copy of your Statement of Qualifications?
- 4 WITNESS JAHN: It is true -- Do I have to push
- 5 a button here?
- 6 MS. DES JARDINS: Yes.
- 7 WITNESS JAHN: It is true. There are some
- 8 corrections to be made, however.
- 9 MS. DES JARDINS: Okay. Let me -- Is Exhibit
- 10 DDJ-331 a true -- a copy of your testimony?
- 11 WITNESS JAHN: It is a copy of my testimony,
- 12 and it contains some errors.
- 13 MS. DES JARDINS: Please state the corrections
- 14 that need to be made.
- 15 WITNESS JAHN: Yes. On Page 16, there are
- 16 call-outs to some figures that are -- that appear on
- 17 Page 17. The call-outs to Figure 4 should say
- 18 Figure 6, and that occurs on Line 4.
- 19 And the call-out on Line 15 to Figure 5 should
- 20 be to Figure 7. And on Figure -- on Line 17, the
- 21 call-out to Figures 4 and 5 should say Figures 6 and 7.
- 22 And then on Page 17, the figure labeled
- 23 Figure 5 should be labeled Figure 7.
- On Page 18, Line 1, the citation of Michel,
- 25 et al., should say 2015, not 2018.

- 1 And there's an error on Page 14 where, on
- 2 Line 22, where I say that the guidance efficiency value
- 3 of 0.9 was used by Kimmerer and Zeug and Cavallo, it
- 4 was not used by Kimmerer 2008. So Kimmerer 2008 should
- 5 be crossed out on Line 22.
- 6 And on Line 17 on that same page where I say
- 7 "Gingras used estimated guidance efficiencies ranging
- 8 from .29 to .81," the low value really should be .25.
- 9 Sorry about those.
- 10 MS. DES JARDINS: Is that all the corrections?
- 11 WITNESS JAHN: That's all the corrections.
- 12 MS. DES JARDINS: Please summarize your
- 13 testimony. And if you can take about 14 minutes.
- 14 WITNESS JAHN: Okay. My name is Andrew Jahn.
- 15 I have a Bachelor's degree in Biological Sciences from
- 16 U.C. Davis, a Ph.D. in Biological Oceanography from the
- 17 Woods Hole Oceanographic Institution.
- 18 My original training in biological
- 19 oceanography opened a vast area of research in physics,
- 20 chemistry, biology, aquatic habitat.
- I have worked on marine, estuarine and
- 22 freshwater projects on problems ranging from oceanic
- 23 fish and plankton distribution to mercury BCD
- 24 contamination in estuarian waters.
- 25 Much of my career focused on entrainment of

1 larval and adult fish in coastal power stations. In

- 2 that context, I became very familiar with the
- 3 statistical properties of fish abundance data,
- 4 including their eggs and larvae.
- 5 I published my results of that statistical
- 6 work in the peer-reviewed fisheries literature.
- 7 This experience, plus my lack of conflicts,
- 8 qualified me to come out of retirement and work with
- 9 the Kier Associates on contract with the National
- 10 Marine Fisheries Service to develop a method to produce
- 11 confidence limits on estimates of the loss of listed
- 12 fish species, including Salmon and Steelhead, at the
- 13 Federal and State water export facilities in the South
- 14 Delta.
- In that capacity, I became familiar with the
- 16 workings of the facilities and with the underpinnings
- 17 of the calculations then in use.
- 18 I appear here as an objective scientist
- 19 unbeholden to anyone. I'm not looking for a job. I'm
- 20 not looking for another contract. I simply want to
- 21 respond to claims made by Dr. Chuck Hanson's rebuttal
- 22 testimony, specifically his arguments that, quote,
- 23 "2010 Flow Criteria Report and the Phase II Technical
- 24 Basis Report should not be accepted by this Board as
- 25 the best-available science without further

- 1 consideration of current science."
- 2 I will show that Hanson's own analysis of old
- 3 data are substandard and that the citations of the work
- 4 of others are in some cases misleading.
- 5 Based on my own review of the currently used
- 6 calculations using salvage fish data and poorly
- 7 documented parameters to estimate loss, I conclude that
- 8 the estimates are biased low and, therefore, that
- 9 recent estimates of population-level effects of the
- 10 exports cited by Hanson are also biased low.
- 11 The deficits in the research underpinning the
- 12 calculations include:
- 13 Poor documentation of guidance system
- 14 efficiency estimates.
- 15 Paucity of efficiency estimates based on
- 16 Chinook Salmon smolt and fry.
- 17 Very limited data on prescreen loss of Salmon
- 18 at SWP.
- 19 No data on prescreen lost data of Salmon at
- 20 the CVP.
- 21 And then arbitrary choices of these parameters
- 22 in the official regulatory documents and in the
- 23 unpublished literature.
- 24 Could we show Page 10 of my testimony, please.
- MS. DES JARDINS: Exhibit DDJ-331.

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1 (Exhibit displayed on screen.)
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- 2 WITNESS JAHN: Okay. Thanks.
- 3 So the top -- The top panel there shows Chuck
- 4 Hanson's analysis of survival. This is 30-day mean
- 5 export versus 30-day mean export volume.
- 6 And it shows a kind of -- a sort of
- 7 messy-looking scatter plot with this fairly flat slope
- 8 and very little R-square value, which means there's a
- 9 lot of uncertainty in the -- in the request.
- 10 On the bottom panel, the same page, I've shown
- 11 my reanalysis of data from the same --
- 12 CO-HEARING OFFICER DODUC: I'm sorry. Could
- 13 we scroll down, Mr. Hunt, so we can see the whole
- 14 graph?
- 15 (Exhibit displayed on screen.)
- 16 WITNESS JAHN: Yeah. Down here, you see a
- 17 re -- reanalysis of the same data, but rather than use
- 18 the volume of the exports alone, I've used the ratio of
- 19 the exports to the amount of inflow to the Delta.
- 20 This is a little more responsive to the -- to
- 21 the hypothesis stated in my testimony -- restated in my
- 22 testimony that it's the combination of the two, the
- 23 inflows and the exports, that is creating the negative
- 24 flows in -- in the OMR and that's leading to mortality
- 25 at pumps.

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On the same -- On the same vein, Hanson's
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- 2 analysis of salvage versus flow are -- are not valid
- 3 because of the high proportion of zeros in the data,
- 4 and his approach to that is too simple. My approach
- 5 here is still too simple, but it's -- it's better than
- 6 his.
- 7 Kimmerer in 2008. Some of these data are
- 8 actually -- Some of Kimmerer's adult are actually more
- 9 recent than those used by Hanson but his analysis was a
- 10 lot more refined. He used -- He showed . . .
- 11 Maybe we can show that on . . .
- 12 What page would that be?
- 13 Yes. On Page 11.
- 14 (Exhibit displayed on screen.)
- 15 WITNESS JAHN: In Kimmerer's analysis, he took
- 16 the time to pull out data -- flow data from times when
- 17 there weren't any fish around.
- 18 And he also attempted to show that there might
- 19 be a difference between the hatcheries' -- two releases
- 20 from two hatcheries up on the Sacramento River. So
- 21 these are refinements that are -- that are absent from
- 22 Hanson's analysis.
- I don't think that Kimmerer actually found a
- 24 significant difference between the two hatcheries but
- 25 he thought that there probably would be if more data

- 1 became available.
- 2 Let's see. I was going to read a little bit
- 3 from Page 14, if I may.
- 4 (Exhibit displayed on screen.)
- 5 WITNESS JAHN: Okay. This is related to the
- 6 prescreen loss estimates.
- 7 The loss calculations are messier than they
- 8 need to be. But, for historical reasons, they -- they
- 9 look at the efficiency of the plant as separate from
- 10 the prescreen loss -- that is, the number of fish that
- 11 disappear before they even get to the screens, which
- 12 aren't really screens -- and then -- and then they had
- 13 those -- they multiplied those two together.
- 14 The problem -- One problem is that they're not
- 15 independent to begin with. You cannot estimate
- 16 prescreen loss without an estimate of efficiency of the
- 17 fish guidance system.
- 18 So on Page 14, I point out that these
- 19 estimates are made . . . by data, but just releasing
- 20 fish within Clifton Court Forebay.
- 21 There's plenty of reason to -- not to believe
- 22 that this increased predation just starts at the gates.
- 23 It -- The principal predators, Striped Bass and the
- 24 birds, can move back and forth and there should be some
- 25 studies done to determine some range of area around

- 1 both facilities where predation is increased.
- 2 If we could show Page 17.
- 3 (Exhibit displayed on screen.)
- 4 WITNESS JAHN: Okay. In Hanson's testimony,
- 5 he -- he was -- he showed very weak relationship
- 6 between group survival and Sacramento flow. And I
- 7 found this odd because, in the file that we got from
- 8 DWR, there was a rather strong relationship.
- 9 Hanson's graph used data that are not in the
- 10 file. He used a 14-day average for reasons of his own.
- 11 But it's -- I found that curious because I got twice
- 12 the R-square value that he got, which means I got half
- 13 the uncertainty that he got in this relationship
- 14 between group survival and Sacramento River flow.
- I should back up and tell you that the group
- 16 survival in this case means the combined survival
- 17 estimates from several multiple tagged groups that were
- 18 released on the same day. So there's fewer data points
- 19 in this graph than there were in the ones that I showed
- 20 previously.
- 21 And, finally, I wanted to note that there is
- 22 an emphasis on sort of variability and -- and -- and
- 23 lack of certainty in -- in Hanson's testimony that's
- 24 even kind of enhanced by some -- some of the way he
- 25 cites the literature.

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1 For example, in his citation of Michel -- the
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- 2 results of Michel, et al., in 2015, he points to
- 3 their -- their reporting of heightened survival rate in
- 4 the Delta versus the river.
- 5 But their definition of the Delta wasn't what
- 6 we're all talking about. They -- They were defining
- 7 the Delta Region which includes the -- the main
- 8 channel, the Sacramento River, over that -- over that
- 9 length of river.
- 10 And what they say in their text actually
- 11 contradicts that. They -- When they scaled their --
- 12 their survival estimates or -- yeah, survival -- to
- 13 survival per 10 kilometers, they said this (reading):
- 14 "Survival rate on a Reach-by-Reach
- 15 basis was quite variable. During the
- 16 first four years of the study, the upper
- 17 river Reaches . . . had some of the
- 18 lowest survival per 10 kilometers, and
- 19 the lower Reaches of the river . . . had
- 20 the highest. The Delta was comparable to
- 21 the upper river, and the San Francisco
- 22 and Suisun Bays . . . had the lowest
- 23 survival rates."
- So, in other words, survival values for 10
- 25 kilometers in the Delta Region, even with the

1 Sacramento River included, were the -- were the lowest

- 2 of any part of the study area other than the bays.
- 3 And, further, on that Page 19A is a
- 4 counterargument to the expectation that high river
- 5 flows should increase survival.
- 6 Hanson cites a report of Buchanan, et al.
- 7 (2018), which was done on the San Joaquin system of
- 8 2 percent survival.
- 9 And it's really odd because, on the very same
- 10 page of his testimony, he shows a -- a value of -- in
- 11 the Sacramento River in 2011 -- in 2011 of greater than
- 12 15 percent survival in the Sacramento River where, of
- 13 course, the majority of the out-migrants migrate.
- So, these kind of things are emphasizing
- 15 uncertainty over information.
- 16 And I'd also like to read to you, if I may, a
- 17 quotation from the Commission -- the U.S. Commission On
- 18 Ocean Policy. And this is on Page 18 of my testimony.
- 19 And these are very serious folks that include Admirals,
- 20 Vice Admirals, ex -- ex Department of Interior leader.
- 21 They say (reading):
- 22 "In contrast to the precautionary
- 23 principle, the Commission recommends
- 24 adoption of a more balanced precautionary
- 25 approach that weighs the level of

```
1
             scientific uncertainty and the potential
             risk of damage as part of every
 2
 3
             management decision. Such an approach
             can be explained as follows."
 5
             And before I get to that, I want to note that
   Peter Moyle -- who's referenced in virtually
 6
 7
   everybody's testimony on these topics -- has noted that
   the winter-run Salmon is critically endangered and
 8
    immediate risk of extinction.
 9
10
             (Reading):
11
                  "Precautionary approach. To ensure
12
             the sustainability of ecosystems for the
13
             benefit of future as well as current
14
             generations, decision-makers should
15
             follow a balanced precautionary approach,
             applying judicious and responsible
16
             management practices based on the
17
18
             best-available science and on proactive,
19
             rather than reactive, policies. Where
             threats of serious or irreversible damage
20
21
             exist, lack of scientific certainty shall
22
             not be used as a justification for
             postponing action . . . "
23
24
             And I just -- That's not a scientific point.
25
   That's a -- That's a point for all of us to consider.
```

```
1 It's whether these mortalities caused by these
  diversions are of a significant difference to society
 2
 3
   is -- is really up to you folks to decide.
             (Reading):
                  "The 2010 Flow Criteria provide
 5
             reasonable and prudent measures to
 6
             protect the viability of the Salmonids,
             including winter-run, a valuable resource
 8
             that is considered by experts to be in
 9
             immediate risk of extinction.
10
                  "Some estimates of population-level
11
12
             incremental mortality of winter-run
             Salmon approach estimates of mortality
13
             caused by the mixed-stock ocean
14
15
             fisheries. Though these estimates are
             uncertain, it would be shameful to
16
             witness the extinction of this species
17
18
             through inaction while awaiting further
19
             study.
                  "A precautionary approach to
20
21
             conservation of winter-run Salmon should
22
             entail a balanced program of protective
             flow criteria, research and management
23
24
             options that give fair weight to the high
25
             risk of extinction of winter-run . . .
```

```
1
             while studies are performed to increase
             understanding of flow issues and reduce
 2
             uncertainty of water export . . . direct
 3
             and indirect mortality.
 4
 5
                  "The West Coast Salmon Fishery has
             also been in decline and cannot wait for
 6
 7
             future studies. A precautionary approach
             would implement protective criteria to
 8
 9
             rebuild stocks to withstand the impacts
             of climate change."
10
             That ends my testimony.
11
12
             MS. DES JARDINS: Thank you.
13
             Dr. Williams, is Exhibit DDJ-340 a true and
   correct copy of your testimony?
14
15
             WITNESS WILLIAMS: Yes.
16
             MS. DES JARDINS: Can you turn on your mic.
             Could you please summarize your testimony.
17
             WITNESS WILLIAMS: Good afternoon. Dr. Tom
18
19
   Williams.
20
             I've already submitted my qualifications under
   DDJ-162, and this is my surbuttal (sic) -- surrebuttal
21
22
   testimony.
                    The summary. In July 2018 -- Sorry.
23
             Okay.
24
             Seismic activities, engineering and design.
25
             The July 2018 Conceptual Engineering Report
```

1 documents that the Department of Water Resources is now

- 2 designing the Delta tunnels to withstand a Maximum
- 3 Considered Earthquake, as defined by the American
- 4 Society of Engineering -- Civil Engineers. This is
- 5 consistent with a recommendation of mine in Part 1.
- 6 So . . . It's improved.
- 7 Since the CER states that seismic activity --
- 8 seismic criteria are still in change, I still recommend
- 9 that the Board put this requirement in the Permit.
- 10 New seismic review of the tunnel liner
- 11 performance.
- 12 Appendix M, the seismic review of the tunnel
- 13 linear performance, assumes that tunnels are bored in
- 14 soils that are very dense to rock.
- The Delta soils at the tunnel depths, based
- 16 upon available information that I've seen, is much
- 17 softer than very dense to rock. So there's a basic
- 18 assumption that appears to be invalid and may
- 19 jeopardize the entire section and discussion of rock
- 20 versus sediment.
- 21 The geotechnical information is still scant,
- 22 to say the least. THE CER states that the Delta soils
- 23 below 60 feet are very stiff to hard. But based upon
- 24 the borings, there aren't that many borings going below
- 25 60 feet. So we're quite concerned about that.

- 1 The geotechnical data referred to in the
- 2 Administrative Draft Supplemental EIR shows that the
- 3 soils at the depth of the tunnels is only soft to
- 4 stiff, not very hard and very dense to rock.
- 5 So we have some internal complications there.
- 6 The new liquification (sic) in Appendix M
- 7 concludes that liquefaction risk is low. A previous
- 8 analysis assumed much higher peak ground accelerations,
- 9 found that there could be substantial continuous
- 10 liquefaction down to 100 feet below surface or more.
- 11 So we're faced with: On one side, we have
- 12 very stiff to rock; on the other side, we have
- 13 liquefiable material.
- 14 Because the soil in the Delta are liquefiable,
- 15 the clay may be plastic, a Class of F seismic analysis
- 16 with the site-specific seismic responses is be likely
- 17 required. We need more information.
- 18 Seepage. We've gone over seepage before. But
- 19 given the known geotechnical issues and the seepage
- 20 problems that are in the vicinity of the new Byron
- 21 Tract Forebay, the Board should require a peer review
- 22 and substantial more information of the proposed
- 23 methods for seepage control, especially in the
- 24 construction of the forebay.
- 25 The South Tunnels pass near the Clifton Court

- 1 Forebay embankments. There's a problem. The tunneling
- 2 may affect the forebay embankments. It could affect
- 3 the integrity of the embankments causing uncontrolled
- 4 release of water due to ground movement caused by the
- 5 tunneling.
- 6 The . . . geotechnical data that we do have
- 7 shows silts and silty clays. Silt's difficult to
- 8 tunnel in and are known to be subject to running during
- 9 tunnel boring. Plastic clays can exhibit squeezing
- 10 movement, expansion, during tunnel boring.
- 11 Both can be causes of loss of ground; that is,
- 12 subsidence.
- I recommend permit terms and conditions be
- 14 required for the risk of tunneling -- tunnel boring in
- 15 the vicinity of the Clifton Court Forebay embankments.
- 16 Okay. The changes. There have been some
- 17 changes made. Thank you for some, not enough for
- 18 others.
- 19 So, I'll -- I'll cover the changes in the
- 20 Project and Appendix 3 of the Administrative Draft
- 21 Supplemental EIR/EIS and efficiencies in the analysis
- 22 of other sections of the Supplemental EIR.
- 23 Changes to the Project constituting a new
- 24 regulatory reservoir, Byron Tract Forebay, instead of
- 25 modifying the Clifton Court.

- 1 The draft states (reading):
- 2 "A new forebay located on Byron
- 3 Tract will be constructed instead of
- 4 dividing, dredging, and expanding
- 5 Clifton . . . Forebay. The Byron Tract
- 6 Forebay would be constructed on an area
- 7 that was proposed for RTM storage under
- 8 the Approved Project."
- 9 Well, the Draft -- The Supplemental EIR does
- 10 not quantify the amount of borrow fill that is needed
- 11 for those embankments and others. This is buried in
- 12 the Conceptual Engineering Report, CER.
- 13 The failure to quantify is a problem that
- 14 disguises the fact that there may be a very large of
- 15 borrow material that needs to be excavated, transported
- 16 and placed.
- 17 So we're quite concerned regarding the entire
- 18 cut and fill operations, especially related to the
- 19 Byron Tract Forebay.
- 20 Soil maps are interesting. They would be
- 21 better if they were based on actual borings in the
- 22 excavation areas, but we'll go with what we have.
- 23 Soil maps show a thick organic deposits over
- 24 much of the Delta, as most of the farmers know. The
- 25 soil maps in the Supplemental EIR should have been

1 cross-referenced with specifications of what is good

- 2 borrow material? What are the good sites from the
- 3 Conceptual Engineering Report? That was the start.
- 4 In addition, Water Resources has available a
- 5 lot of borings that have not been circulated. And I
- 6 would assume that there are existing borings for other
- 7 engineering projects, including the Conceptual
- 8 Engineering Report.
- 9 The Borrow Area Geotechnical Report from
- 10 In-Delta Storage Program, as well as other sets of
- 11 borings, could provide this information and provide us
- 12 with a generalized location of where the Reclamation
- 13 materials will be sourced and how far they are from the
- 14 areas where they will be placed.
- 15 We have one new element also: That reusable
- 16 tunnel material from the tunnel borings could be used
- 17 to reclaim the borrow pits. However, that has not been
- 18 indicated or clarified as to where it's going to come
- 19 from, which shaft, what treatment it will have, and
- 20 who's going to transport it and place it, and, I say,
- 21 manage it, landscape it, modify it so as to provide
- 22 suitable remediation of the borrow sites.
- When you start talking about taking material
- 24 out of the Delta, the first thing is major emissions
- 25 regarding hazardous materials. There's been a lot of

- 1 stuff in the Delta for a long time.
- 2 The Supplemental EIR. While there are tests
- 3 for the toxic constituents and the tunnel muck, there's
- 4 been no testing of what could be expected from
- 5 potential borrow sites.
- 6 And the tests of the Delta channel soils would
- 7 indicate . . . document for the Clifton Court borrow,
- 8 that we could get lots of metals, DDT, DDE and some
- 9 PCBs.
- 10 There's been no analysis of emissions of
- 11 sulfides from the rich organic putrified composted
- 12 topsoil of the potential borrow sites and how deep it
- 13 will go.
- 14 Avoiding any significant impacts from
- 15 underseepage, as indicated by a previous speaker, are
- 16 borrow overburden, toxic constituents, would require
- 17 trucking, barging, of much of the borrow fill for parts
- 18 of -- from other parts of the Project and the Delta.
- 19 This would mean barges, traffic analysis, is
- 20 needed in the Supplemental EIR. And associated air
- 21 quality emissions from such traffic must be included
- 22 also.
- That summarizes a lot of pages.
- 24 CO-HEARING OFFICER DODUC: All right. Thank
- 25 you.

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1 Does that conclude your direct?
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- MS. DES JARDINS: Yes, it does.
- 3 CO-HEARING OFFICER DODUC: All right. Let's
- 4 take a short break for the court reporter while the
- 5 Department set up for cross-examination.
- 6 We will return at 3:30.
- 7 (Recess taken at 3:20 p.m.)
- 8 (Proceedings resumed at 3:30 p.m.:)
- 9 CO-HEARING OFFICER DODUC: All right. It is
- 10 3:30. We are back.
- 11 And, Miss Ansley, you may begin your cross.
- MS. ANSLEY: Thank you.
- Good afternoon. My name is Jolie-Anne Ansley.
- 14 I'm here from the Department of Water Resources.
- I have questions for both Dr. Jahn and for
- 16 Dr. Williams. I'd like to start with Dr. Jahn.
- 17 CROSS-EXAMINATION BY
- MS. ANSLEY: Am I pronouncing that right, sir?
- 19 WITNESS JAHN: Sounds about right to me.
- 20 MS. ANSLEY: Does it? Okay.
- 21 Dr. John, did you draft your testimony?
- 22 WITNESS JAHN: Yes, I did.
- MS. ANSLEY: Did you get any assistance with
- 24 that?
- 25 WITNESS JAHN: I got some assistance and some

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1 rearrangements, yes.
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- MS. ANSLEY: And by "rearrangements," what do
- 3 you mean?
- 4 WITNESS JAHN: To make it flow better. I -- I
- 5 wasn't familiar with the hearing process and all that,
- 6 so I just -- My initial cut at it was just as a
- 7 technical response to Hanson's statements.
- 8 MS. ANSLEY: And -- And I'm going to jump
- 9 right in.
- 10 And your testimony is DDJ-331; is that
- 11 correct?
- 12 (Pause in proceedings.)
- 13 WITNESS JAHN: I don't know.
- MS. ANSLEY: Well, if it makes you feel
- 15 better, I asked them as well.
- 16 Do you have a copy of your testimony in front
- 17 of you, sir?
- 18 WITNESS JAHN: Yes, I do.
- MS. ANSLEY: And can we bring that up,
- 20 Mr. Hunt?
- 21 (Exhibit displayed on screen.)
- MS. ANSLEY: And I only have a few questions
- 23 but if at any time you need to read more of your
- 24 testimony or read it in context, just let me know.
- 25 Are you familiar with the Perry, et al., 2018

```
1 study?
 2
             WITNESS JAHN: Yes, I am.
 3
             MS. ANSLEY: And to make sure that we're on
   the same page --
 5
             Can we -- Actually, I apologize. Can we pull
   up DWR-1368.
 6
 7
             And while he's doing that, Dr. Jahn, I believe
   that this is not a study that you cited in your paper;
 8
   is that correct? Or during your testimony?
9
10
             WITNESS JAHN: Well, if I didn't cite it, then
   it's one with which I'm not familiar, but it sounds
11
12 familiar to me.
13
             That's the --
14
             (Exhibit displayed on screen.)
15
             WITNESS JAHN: -- the tag --
16
             MS. ANSLEY: Let's do this.
             WITNESS JAHN: -- late fall-run Salmon.
17
             MS. ANSLEY: If you can see that it's on the
18
   screen in front of you.
19
20
             Does that refresh your recollection?
21
             (Reading):
22
                  "Flow-mediated effects on travel
             time, routing, and survival of Juvenile
23
24
             Chinook Salmon in a spatially complex,
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tidally influenced (sic) . . . "

25

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1 WITNESS JAHN: The answer to your first
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- 2 question is, no, I -- I haven't read that report.
- 3 MS. ANSLEY: You are not familiar with Perry,
- 4 et al., 2018.
- 5 WITNESS JAHN: The Perry, et al. --
- 6 MS. ANSLEY: The -- I'm sorry, sir.
- 7 The article on the screen.
- 8 WITNESS JAHN: No, I'm not familiar with that.
- 9 MS. ANSLEY: Is it your understanding that
- 10 this was cited by Dr. Hanson in his testimony?
- 11 Are you familiar with Dr. Hanson's testimony,
- 12 which is DWR-1223-Revised?
- 13 WITNESS JAHN: I am.
- MS. ANSLEY: And did you read the references
- 15 cited by Dr. Hanson in this report regarding
- 16 flow-mediated effects?
- 17 WITNESS JAHN: I didn't read them all. I read
- 18 the references that seemed to be the most salient to
- 19 his arguments.
- MS. ANSLEY: And so you . . . And so . . .
- 21 So do you have any understanding of whether
- 22 there's been recent study looking at the extent to
- 23 which within-Reach survival contributes to the overall
- 24 flow survival relationship?
- 25 WITNESS JAHN: It seemed to me that the Michel

1 paper 2015 and the Perry, et al., paper which I think

- 2 was 2010 addressed those issues.
- 3 MS. ANSLEY: But you're not aware of this more
- 4 recent research; is that correct?
- 5 WITNESS JAHN: That's correct.
- 6 MS. ANSLEY: You're not. Okay.
- 7 (Pause in proceedings.)
- 8 MS. ANSLEY: And is it your understanding that
- 9 more recent research has concluded that riverine
- 10 Reaches exhibit high survival at all levels of inflow?
- 11 (Pause in proceedings.)
- 12 WITNESS JAHN: I'm not sure I would say that.
- 13 MS. ANSLEY: And you're not aware of similar
- 14 recent research that demonstrates that tidal Reaches
- 15 have lower but constant survival rates with respect to
- 16 inflow.
- 17 (Pause in proceedings.)
- 18 WITNESS JAHN: No, I'm not familiar with that,
- 19 either.
- 20 MS. ANSLEY: And, in fact, that recent
- 21 research demonstrates that it is only the transitional
- 22 zones from bidirectional tidal flows to unidirectional
- 23 flow that demonstrate a positive relationship to
- 24 inflow.
- 25 MS. DES JARDINS: I have an objection to this

1 question as vague about what study she's referring to

- 2 that have these conclusions.
- 3 CO-HEARING OFFICER DODUC: Miss Ansley.
- 4 MS. ANSLEY: Dr. Hanson testified extensively
- 5 about the flow relationship to survival of Salmonids.
- 6 He cited these studies in his testimony.
- 7 And what I'm ask --
- 8 CO-HEARING OFFICER DODUC: I'm sorry. Are
- 9 you -- When you say "these studies" . . .
- 10 MS. ANSLEY: He cited Perry, et al., 2018 and
- 11 studies that sort of build up to that --
- 12 CO-HEARING OFFICER DODUC: Hold on.
- 13 MS. ANSLEY: -- as wells as his own research.
- 14 CO-HEARING OFFICER DODUC: I'm sorry. You
- 15 said he cited to Perry 2018?
- MS. ANSLEY: Dr. Hanson cited to studies
- 17 regarding and supporting his conclusions on flow
- 18 relationships with survival of Salmonids from the
- 19 Sacramento, San Joaquin and --
- 20 CO-HEARING OFFICER DODUC: Dr. Hanson, not
- 21 Dr. Jahn.
- MS. ANSLEY: Dr. Hanson did.
- 23 And so Dr. Jahn just testified that he cited a
- 24 Michel, et al., 2015 and I believe he said he cited
- 25 Perry, et al., 2010.

- 1 And I'm asking whether he's aware of the
- 2 results of the more recent research on the flow
- 3 relationships and those findings.
- 4 He did say that he was unaware of the Perry,
- 5 et al., 2018 study cited by Dr. Hanson.
- 6 CO-HEARING OFFICER DODUC: And these would be
- 7 studies cited by Dr. Hanson in his rebuttal testimony.
- 8 MS. ANSLEY: These were cited by Dr. Hanson in
- 9 his DWR-1223-Revised rebuttal testimony.
- 10 CO-HEARING OFFICER DODUC: To which Dr. Jahn
- 11 is --
- MS. ANSLEY: Is here specifically to rebut.
- 13 CO-HEARING OFFICER DODUC: Okay.
- MS. ANSLEY: Or surrebut.
- 15 CO-HEARING OFFICER DODUC: Surrebut, yes.
- Miss Meserve.
- 17 MS. MESERVE: I would just add that it's vague
- 18 when she's reading a conclusion from a specific study
- 19 and she hasn't even pulled up that study to show
- 20 Dr. Jahn what it is she's referring to.
- 21 CO-HEARING OFFICER DODUC: Yes.
- MS. MESERVE: It's impossible for him to
- 23 answer.
- 24 CO-HEARING OFFICER DODUC: I appreciate,
- 25 Miss Ansley, that you're trying to expedite this, but I

- 1 think it will be helpful to all of us to make that
- 2 connection between your question and the citation in
- 3 Dr. Hanson's rebuttal testimony to which Dr. Jahn is
- 4 responding.
- 5 MS. ANSLEY: So, the testimony I'm discussing
- 6 is Perry, et al., 2018, which is the -- sort of the
- 7 culminating study. He said that he was not aware of
- 8 this specific study.
- 9 I was asking whether he was aware of these
- 10 recent conclusions more generally, and he was saying
- 11 that he was not.
- 12 CO-HEARING OFFICER DODUC: Correct.
- 13 Miss Ansley, so, because he's not aware of --
- 14 is not familiar with the studies and the results of
- 15 that study . . .
- MS. MESERVE: It's asked and answered.
- 17 MS. ANSLEY: I'm ready to move on. I just --
- 18 CO-HEARING OFFICER DODUC: Let's move on.
- 19 MS. ANSLEY: -- was closing the door on --
- 20 CO-HEARING OFFICER DODUC: Okay.
- 21 MS. ANSLEY: -- that topic.
- 22 And then, Dr. Jahn, I'd like to look at some
- 23 of the figures in your testimony.
- 24 Looking at your figure on Page 10 -- This
- 25 would be Figure 3 of your testimony, which is DDJ-331.

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1 Would you go to that page, please.
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- 2 (Exhibit displayed on screen.)
- 3 MS. ANSLEY: And it's up ahead of us on the
- 4 screen.
- 5 (Pause in proceedings.)
- 6 MS. ANSLEY: Do you have that in front of you?
- 7 And looking at Figure 3, this is your near
- 8 reproduction of Dr. Hanson's regression; is that
- 9 correct?
- 10 WITNESS JAHN: That's right.
- MS. ANSLEY: And your testimony was that
- 12 Dr. Hanson's relationship had a very low R-squared,
- 13 which is indicative of lots of uncertainty; is that
- 14 correct?
- 15 WITNESS JAHN: That's correct.
- MS. ANSLEY: And, in fact, that was
- 17 Dr. Hanson's conclusion was that the low R-squared
- 18 demonstrated a weak relationship; is that correct?
- 19 WITNESS JAHN: That's correct.
- MS. ANSLEY: And looking at Figure 3 here with
- 21 an R-squared of .01, do you see that in your Figure 3?
- 22 WITNESS JAHN: Yes.
- MS. ANSLEY: And, indeed, does that not mean
- 24 that this analysis failed to explain approximately 98
- 25 percent of the variability in the data?

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1 WITNESS JAHN: His does, yes.
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- MS. ANSLEY: And, then, looking below at your
- 3 Figure 4, if I understand correctly, this is where you
- 4 added in the export inflow -- the inflow ratio; is that
- 5 correct?
- 6 WITNESS JAHN: That's right.
- 7 MS. ANSLEY: And here, the R-squared is .1197;
- 8 is that correct?
- 9 WITNESS JAHN: Yes.
- 10 MS. ANSLEY: And so this relationship fails to
- 11 explain approximately 88 percent of the -- the
- 12 variability in this dataset; is that correct?
- 13 WITNESS JAHN: Yes.
- 14 (Pause in proceedings.)
- MS. ANSLEY: Similarly, moving on to Page 17
- 16 and looking at your figures on Page 17.
- 17 (Exhibit displayed on screen.)
- 18 MS. ANSLEY: Do you have that in front of you,
- 19 sir?
- 20 WITNESS JAHN: I do.
- 21 MS. ANSLEY: Similarly, this -- these two
- 22 figures also have very low R-square values; is that
- 23 correct?
- 24 WITNESS JAHN: Yes, that's correct.
- MS. ANSLEY: Again, showing that most of the

- 1 data is unexplained by the relationship?
- 2 WITNESS JAHN: Most of the errors in the --
- 3 Most of the variance in the data is unexplained by the
- 4 relationship, yes.
- 5 MS. ANSLEY: And would you categorize these as
- 6 weak relationships?
- 7 WITNESS JAHN: Yes, I would, but I think
- 8 they're coherent.
- 9 CO-HEARING OFFICER DODUC: I'm sorry. What
- 10 was that?
- 11 WITNESS JAHN: They're coherent. You can --
- 12 The -- The . . .
- 13 The -- The reanalysis of the -- of the group
- 14 survival and the transit time in these -- in these
- 15 graphs are both more coherent than the -- their
- 16 versions in the Hanson testimony.
- My point here is not that what I've done is
- 18 the best way to analyze the data but simply to show
- 19 that Hanson's analysis has left some stones unturned.
- MS. ANSLEY: In fact, you're doing that by
- 21 comparing the differences in the R-squared values; is
- 22 that correct?
- 23 WITNESS JAHN: That's right.
- MS. ANSLEY: Looking at your Figure 7, though,
- 25 it still fails to explain more than 90 percent of the

- 1 variability in the data; is that correct?
- WITNESS JAHN: That's right.
- 4 that the file that I had to work with didn't allow for
- 5 making a reasonable estimate of transit time, but that
- 6 the one I used was a little more explanatory than the
- 7 one that Dr. Hanson used.
- 8 MS. ANSLEY: You report the P values for your
- 9 graphs?
- 10 WITNESS JAHN: I didn't report them. I looked
- 11 them up. I don't think the one in Figure 7 is
- 12 significant but certainly the one in Figure 6 is.
- 13 MS. ANSLEY: I have no further questions for
- 14 Dr. Jahn.
- 15 I'd like to shuffle my papers and materials
- 16 for Dr. Williams.
- 17 Thank you, Dr. Jahn.
- 18 WITNESS JAHN: You're welcome.
- 19 MS. ANSLEY: And, sir, if you have anything to
- 20 add, your attorneys can redirect you after my cross.
- 21 Good afternoon, Dr. Williams.
- 22 WITNESS WILLIAMS: Good afternoon.
- 23 MS. ANSLEY: Nice to see you again. I believe
- 24 we chatted in Part 1.
- 25 And, sir, I'd just like to confirm some

- 1 answers that you gave me in Part 1 just to -- as a
- 2 buildup to the questions I'm going to ask you
- 3 specifically about your analysis in your testimony
- 4 here.
- 5 You are not a Professionally Registered
- 6 Engineer, that's correct?
- 7 WITNESS WILLIAMS: I am not a State of
- 8 California Certified Engineer.
- 9 MS. ANSLEY: Are you licensed in any other
- 10 state as a Professional Engineer.
- 11 WITNESS WILLIAMS: No, I am not. I'm now
- 12 retired.
- MS. DES JARDINS: I have an objection:
- 14 The Department of Water Resources was able to
- 15 explore Dr. Williams' test -- Dr. Williams'
- 16 qualifications as submitted as Exhibit DDJ-162 in
- 17 Part 1.
- 18 And this is surrebuttal and this is
- 19 repetitive.
- 20 CO-HEARING OFFICER DODUC: Yes. Miss Ansley
- 21 did caveat at the beginning that she's asking some
- 22 foundational questions to lead up to specific questions
- 23 with respect to the surrebuttal testimony.
- MS. ANSLEY: That's correct. I only have one
- 25 more question on this -- this line, and then I later

1 have a question about specific testing that was done in

- 2 this.
- 3 And, sir, let me make sure I'm looking at the
- 4 right thing, you are not a Registered Geotechnical
- 5 Engineer or a Registered Hydrogeologist; is that
- 6 correct?
- 7 WITNESS WILLIAMS: Correct.
- 8 MS. ANSLEY: Okay. And looking at your
- 9 testimony, which is DDJ-340.
- 10 (Exhibit displayed on screen.)
- 11 MS. ANSLEY: Oh, so quickly.
- 12 And if we could go to Page 6 of your
- 13 testimony, if you have that in front of you.
- 14 WITNESS WILLIAMS: Yes, I do.
- MS. ANSLEY: And looking about halfway down
- 16 the page, do you see the sentence that starts with
- 17 "Assuming"?
- 18 WITNESS WILLIAMS: Yes.
- 19 MS. ANSLEY: And could you read that sentence.
- 20 I don't want to read it into the record.
- 21 WITNESS WILLIAMS: "Assuming the soil" --
- MS. ANSLEY: Oh, don't --
- 23 CO-HEARING OFFICER DODUC: Read it to
- 24 yourself, not into the -- not out loud.
- 25 CO-HEARING OFFICER MARCUS: We're allergic to

- 1 that.
- 2 (Laughter.)
- 3 MS. ANSLEY: I'm trying to learn something
- 4 after all these years.
- 5 Meaning me.
- 6 (Pause in proceedings.)
- 7 WITNESS WILLIAMS: Yes.
- 8 MS. ANSLEY: And is it your understanding that
- 9 that seismic parameter was based on a site response
- 10 analysis performed near the Clifton Court Forebay?
- 11 WITNESS WILLIAMS: For the forebay, yeah.
- MS. ANSLEY: And have you ever -- Have you
- 13 ever done a site response analysis?
- 14 WITNESS WILLIAMS: I have not done a site
- 15 analysis for this.
- MS. ANSLEY: And is it typical in a site --
- 17 But you are familiar with site response analysis
- 18 generally.
- 19 WITNESS WILLIAMS: Yes.
- 20 MS. ANSLEY: Is -- And when you say "for
- 21 this," what do you mean "for this"?
- 22 WITNESS WILLIAMS: For the forebay and/or the
- 23 specifics of the southern end of the Sacramento Delta.
- MS. ANSLEY: Okay. To make sure it's clear,
- 25 you have not done a site response analysis in the Delta

1 in connection with your testimony for the California

- 2 WaterFix; is that correct?
- 3 WITNESS WILLIAMS: Correct.
- 4 MS. ANSLEY: But you are familiar with site
- 5 response analyses.
- 6 WITNESS WILLIAMS: Yes.
- 7 MS. ANSLEY: Have you performed site response
- 8 analyses for other projects?
- 9 WITNESS WILLIAMS: In the UA outside the State
- 10 of California.
- 11 MS. ANSLEY: And is it your understanding that
- 12 it's typical to consider the data collected in the
- 13 immediate vicinity of the site you're working with?
- 14 WITNESS WILLIAMS: Yes.
- MS. ANSLEY: And can we turn to the next page
- 16 and focus on your Table 3-5. I guess it's probably our
- 17 Table 3-5 which you reproduced here.
- 18 (Exhibit displayed on screen.)
- 19 MS. ANSLEY: And just so we don't have to pull
- 20 up a lot of maps:
- 21 Is it your understanding that the soil boring
- 22 that was collected near the Clifton Court Forebay is
- 23 the bottom row of that chart, Table 3-5, which would be
- 24 DCRA-DH-024; is that correct?
- WITNESS WILLIAMS: 024, yes.

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1 MS. ANSLEY: So we're both focused on the last
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- 2 row of that chart; is that correct?
- 3 WITNESS WILLIAMS: Yes.
- 4 MS. ANSLEY: Now, based on your experience
- 5 with site response analysis, is it your
- 6 understanding -- Or do you have an under -- Well, let
- 7 me back up.
- 8 Do you have experience with Triaxial Sheer
- 9 Strength Tests?
- 10 WITNESS WILLIAMS: Myself --
- MS. ANSLEY: Yes.
- 12 WITNESS WILLIAMS: -- specifically? No.
- MS. ANSLEY: So you have not performed that
- 14 sort of testing.
- 15 WITNESS WILLIAMS: I haven't. I personally
- 16 have not performed that. I've been around and . . .
- 17 MS. ANSLEY: Is it your -- Do you have an
- 18 understanding of what is meant by an Unconsolidated
- 19 Undrained Triaxial Test?
- 20 WITNESS WILLIAMS: Yes. In general, yes.
- MS. ANSLEY: And, similarly, do you have an
- 22 understanding of what I mean by an Unconfined
- 23 Compressive Strength Test?
- 24 WITNESS WILLIAMS: Unimpacted?
- 25 MS. ANSLEY: Unconfined Compressive Strength

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1 Test.
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- WITNESS WILLIAMS: Yeah, I -- Generally, yes.
- 3 MS. ANSLEY: Have you performed an Unconfined
- 4 Compressive Strength Test?
- 5 WITNESS WILLIAMS: No, I personally have not.
- 6 (Pause in proceedings.)
- 7 MS. ANSLEY: Is it your understanding that
- 8 these are two different tests performed pursuant to two
- 9 different ASTM standards?
- 10 WITNESS WILLIAMS: Yes.
- 11 MS. ANSLEY: And isn't it correct, per you're
- 12 understanding, that the -- sorry, these names are
- 13 difficult -- that the Unconsolidated Undrained Triaxial
- 14 Test is performed with confining pressure; is that
- 15 correct?
- 16 WITNESS WILLIAMS: I'm not familiar.
- MS. ANSLEY: How about the Unconfined
- 18 Compressing Strength Test? Are you aware that is
- 19 performed with any confining pressure?
- 20 WITNESS WILLIAMS: I -- Generally, no.
- MS. ANSLEY: No, it's not, or you're not
- 22 aware?
- 23 WITNESS WILLIAMS: I'm not aware.
- MS. ANSLEY: So you are not aware -- You're
- 25 aware that these tests are performed differently

1 pursuant to different standards, but you are not aware

- 2 of the differences of --
- 3 WITNESS WILLIAMS: Of the details of the
- 4 operation spatially, no.
- 5 MS. ANSLEY: Could you explain to me how the
- 6 two tests are operated differently?
- 7 WITNESS WILLIAMS: Confine . . . No, I
- 8 cannot, right now.
- 9 MS. DES JARDINS: I have an objection as to
- 10 relevance. This is the data that the Supplemental
- 11 EIR/EIS referred to.
- 12 And if the Department of Water Resources wants
- 13 to question what data their own soil testers referred
- 14 to, it would be more appropriate to do that.
- 15 CO-HEARING OFFICER DODUC: I believe
- 16 Miss Ansley is trying to ascertain Dr. Williams'
- 17 understanding of these tests.
- 18 MS. ANSLEY: Yes. And the fact that he is the
- 19 one critiquing our use of one particular test but using
- 20 a different test.
- 21 So, my next question is: Dr. Williams,
- 22 looking at the bottom row of of Table 3-5.
- Do you see that, sir?
- 24 WITNESS WILLIAMS: 3-5?
- MS. ANSLEY: Um-hmm. It's on Page 7.

- 1 WITNESS WILLIAMS: Yes.
- 2 MS. ANSLEY: It's the one we've been focusing
- 3 on. It might be clearer to see on the screen there.
- 4 So looking at Table --
- 5 WITNESS WILLIAMS: 024.
- 6 MS. ANSLEY: Oh, excuse me. Go ahead. Are
- 7 you ready?
- 8 WITNESS WILLIAMS: For 024?
- 9 MS. ANSLEY: Yes.
- 10 Looking at the bottom row for boring --
- 11 WITNESS WILLIAMS: Yeah.
- 12 MS. ANSLEY: -- Sample Source 024, do you see
- 13 in the far right column under "Remarks" that the test
- 14 used was the UU Test.
- 15 WITNESS WILLIAMS: The UU Test. I'm not
- 16 familiar with them.
- 17 MS. ANSLEY: So is it your understanding that
- 18 this is actually the Unconsolidated Undrained Triaxial
- 19 Compression Test?
- 20 WITNESS WILLIAMS: I am generally, yes.
- MS. ANSLEY: So it's your understanding that
- 22 that -- that those values in that chart were results of
- 23 the UU Test.
- 24 WITNESS WILLIAMS: Of the UU Test and the CU
- 25 Test.

- 1 MS. ANSLEY: Sir, can you point out the --
- 2 Let's talk specifically about Boring 24, which is the
- 3 bottom row.
- 4 Is it your understanding that the results in
- 5 the bottom row of that table were -- were calculated
- 6 using the UU Test, which I'm going to represent is the
- 7 Unconsolidated Undrained Triaxial Compression Test?
- 8 Is that your understanding as well?
- 9 WITNESS WILLIAMS: Yes.
- 10 MS. ANSLEY: And so it's your understanding
- 11 that this was not performed. Those numbers were not
- 12 gained using the Compressive Strength Test.
- 13 WITNESS WILLIAMS: Correct.
- MS. ANSLEY: And you . . .
- So, the C values there, the total stress, do
- 16 you see the C values --
- 17 WITNESS WILLIAMS: Yes.
- 18 MS. ANSLEY: -- in pounds per square foot?
- 19 And in our bottom row there, it's 2,000 is the
- 20 value.
- 21 Do you see that?
- 22 WITNESS WILLIAMS: Yes.
- MS. ANSLEY: And this is a number that is from
- 24 the Unconsolidated Undrained, the UU Test; is that
- 25 correct?

- 1 WITNESS WILLIAMS: Correct.
- 2 MS. ANSLEY: And since this test was
- 3 performed -- And I'll represent to you the UU Test is
- 4 performed with confining pressure.
- 5 MS. DES JARDINS: Object -- objection --
- 6 MS. ANSLEY: I haven't asked a question.
- 7 MS. DES JARDINS: -- it's --
- 8 CO-HEARING OFFICER DODUC: Hold on. Hold on.
- 9 I don't have a question asked yet --
- 10 MS. DES JARDINS: Okay.
- 11 CO-HEARING OFFICER DODUC: -- so let her
- 12 finish her question.
- MS. ANSLEY: I'm actually going to rephrase.
- 14 It was getting awkward to begin with.
- 15 WITNESS WILLIAMS: Under the CU test. Pardon
- 16 me.
- 17 MS. ANSLEY: Under the UU Test, which is what
- 18 was done to create the 2,000 pounds per square foot --
- 19 WITNESS WILLIAMS: Yeah.
- 20 MS. ANSLEY: -- this was performed using an
- 21 unconfined test.
- 22 Is that your understanding?
- 23 WITNESS WILLIAMS: Yes.
- MS. ANSLEY: Under pressure.
- Or, no, I'm sorry. It was an Unconsolidated

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1 Undrained --
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- 2 WITNESS WILLIAMS: Undrained.
- 3 MS. ANSLEY: -- Triaxial Test; correct?
- 4 WITNESS WILLIAMS: Yes.
- 5 MS. ANSLEY: We've established that?
- 6 Yet you report that the C value is the
- 7 unconfined compressive strength.
- 8 Do you see that on the same page, Number 7?
- 9 WITNESS WILLIAMS: Let me . . .
- 10 CO-HEARING OFFICER DODUC: It's second-to-last
- 11 sentence on Page 7.
- 12 WITNESS WILLIAMS: (Examining document.)
- 13 Oh, yes.
- MS. ANSLEY: Isn't it true, however, that the
- 15 C values for an Unconsolidated Undrained Triaxial Test
- 16 is actually the sheer strength and not the unconfined
- 17 compressive strength.
- 18 Is that your understanding of the
- 19 Unconsolidated Undrained --
- 20 WITNESS WILLIAMS: I am --
- 21 MS. ANSLEY: -- Triaxial Test?
- 22 WITNESS WILLIAMS: -- unsure.
- 23 CO-HEARING OFFICER DODUC: Hold on.
- I didn't hear the answer, Dr. Williams.
- 25 WITNESS WILLIAMS: I am unsure.

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1 MS. ANSLEY: You're unsure whether the 2,000
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- 2 Total Stress C value in the last row of Table 3-5 is
- 3 the sheer strength or the unconfined compressive
- 4 strength?
- 5 WITNESS WILLIAMS: Unconfined progressive?
- 6 MS. ANSLEY: Compressive.
- 7 WITNESS WILLIAMS: Compressive.
- 8 I'm not sure.
- 9 MS. ANSLEY: And isn't it true that the
- 10 unconfined compressive strength cannot be measured
- 11 using the UU Test?
- 12 WITNESS WILLIAMS: I believe that's correct.
- 13 MS. ANSLEY: And -- But here in your
- 14 testimony, you took that C value and represented it as
- 15 the unconfined compressive strength; is that correct?
- 16 WITNESS WILLIAMS: I don't see where . . .
- 17 MS. ANSLEY: It's just below the chart. It's
- 18 a couple lines of testimony below your Table 3-5.
- 19 WITNESS WILLIAMS: I believe so, right.
- 20 MS. ANSLEY: And is it your understanding that
- 21 that is now incorrect?
- 22 WITNESS WILLIAMS: I believe so.
- 23 MS. ANSLEY: So, in fact, if you -- You agree
- 24 with me that that is perhaps incorrect, that the C
- 25 value is not the unconfined compressive strength value;

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1 correct?
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- 2 WITNESS WILLIAMS: Yes.
- 3 MS. ANSLEY: If we look back a page, onto
- 4 Page 6.
- 5 (Exhibit displayed on screen.)
- 6 MS. ANSLEY: If you look at Table 20.3-1, Site
- 7 Classification. And the C value is 2,000 pounds per
- 8 square feet.
- 9 Do you see how that falls into Site Class C,
- 10 very dense soil and soft rock?
- 11 WITNESS WILLIAMS: Yes.
- MS. ANSLEY: And so your conclusion that the
- 13 sheer strength is 1,000 was based on your conclusion
- 14 that the C value was the unconfined compressive
- 15 strength; is that correct?
- 16 WITNESS WILLIAMS: I was also looking at the
- 17 other C values, but I guess so, yes.
- 18 MS. ANSLEY: Let me look at the remainder of
- 19 my questions.
- 20 (Pause in proceedings.)
- 21 MS. ANSLEY: All right. I'd like to ask just
- 22 two -- maybe two more questions.
- 23 Looking at Page 23 of your testimony.
- 24 WITNESS WILLIAMS: 23?
- 25 (Exhibit displayed on screen.)

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1 WITNESS WILLIAMS: Yes.
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- 2 MS. ANSLEY: And do you see the testimony that
- 3 says that (reading):
- 4 "It is true that sediments in
- 5 Clifton Court Forebay could be
- 6 contaminated."
- 7 WITNESS WILLIAMS: It would be my . . .
- 8 consideration, yes.
- 9 MS. ANSLEY: Just to confirm: It's your
- 10 understanding that the California WaterFix Project as
- 11 now proposed does not include any dredging of the
- 12 Clifton Court Forebay; is that correct?
- 13 WITNESS WILLIAMS: Yes.
- MS. ANSLEY: And then moving on to my last
- 15 topic, which is Page 26.
- 16 (Exhibit displayed on screen.)
- MS. ANSLEY: Where you talk about effects of
- 18 placing tunnel muck in the borrow pits.
- 19 WITNESS WILLIAMS: Yes.
- MS. ANSLEY: Can we call up, Mr. Hunt,
- 21 DWR-207.
- 22 WITNESS WILLIAMS: What? Oh.
- 23 (Exhibit displayed on screen.)
- MS. ANSLEY: And can we go to Page 13.
- 25 CO-HEARING OFFICER DODUC: Can we establish

- 1 what this is?
- 2 MS. ANSLEY: Pardon me.
- 3 This is, obviously, the Reusable Tunnel
- 4 Material Testing Report, March 2014.
- 5 Dr. Williams, are you familiar with this
- 6 report?
- 7 WITNESS WILLIAMS: I have read -- I have read
- 8 it, yes.
- 9 MS. ANSLEY: Can we go on to Page 13?
- 10 (Exhibit displayed on screen.)
- 11 MS. ANSLEY: Can we maybe zoom out a little.
- 12 (Exhibit displayed on screen.)
- MS. ANSLEY: And are you familiar with this
- 14 flowchart?
- 15 WITNESS WILLIAMS: I remember seeing the
- 16 flowchart, but I can't see it now.
- MS. ANSLEY: I can't see it without my
- 18 glasses.
- 19 To the extent you can see it --
- 20 WITNESS WILLIAMS: Yeah.
- 21 MS. ANSLEY: -- do you see how it -- it notes
- 22 that all tunnel material, dredge material and
- 23 construction spoils are going to be tested for
- 24 hazardous material?
- 25 WITNESS WILLIAMS: Yes, I understand that.

- 1 MS. ANSLEY: And that any test of hazardous
- 2 material will be sent to a landfill?
- 3 WITNESS WILLIAMS: To a proper landfill, yeah.
- 4 MS. ANSLEY: Thank you. I have no further
- 5 questions.
- 6 CO-HEARING OFFICER DODUC: All right. Thank
- 7 you, Miss Ansley.
- 8 I believe next up is Miss Meserve.
- 9 Do we know whether Mr. Ruiz intends to return
- 10 to conduct cross?
- MS. MESERVE: He is not.
- 12 CO-HEARING OFFICER DODUC: He is not.
- So, then, do we know whether Mr. Keeling will
- 14 return to conduct cross?
- MS. MESERVE: He will not.
- 16 CO-HEARING OFFICER DODUC: So, then,
- 17 Mr. Shutes, we'll get --
- 18 MR. SHUTES: (Shaking head.)
- 19 CO-HEARING OFFICER DODUC: You're passing as
- 20 well.
- 21 All right. I guess you guys don't want to
- 22 stay until 6 o'clock tonight.
- MS. MESERVE: It's such a lovely offer.
- 24 WITNESS WILLIAMS: Do we have to come back on
- 25 Friday?

- 1 CO-HEARING OFFICER DODUC: Not if we finish
- 2 the cross, and any redirect or recross.
- 3 All right. Miss Meserve, you are our
- 4 remaining cross.
- 5 That didn't come out right.
- 6 (Laughing.)
- 7 MS. MESERVE: At least I'm not standing
- 8 between anyone and lunch.
- 9 I just have a few questions for Dr. Jahn, as
- 10 well as Dr. Williams, regarding a couple of points in
- 11 their testimony. I should be okay with the 15 minutes.
- 12 I'll start out with Dr. Williams since he's
- 13 warmed up.
- 14 CROSS-EXAMINATION BY
- MS. MESERVE: Let's see. On Pages -- And I'm
- 16 Osha Meserve. I represent Local Agencies of the North
- 17 Delta.
- 18 And I'm looking, Dr. Williams, at Pages 14 and
- 19 15 of your testimony where you discussed the borrow
- 20 fill areas.
- 21 (Exhibit displayed on screen.)
- 22 MS. MESERVE: And my question is: Given your
- 23 understanding of the subsurface water levels in many
- 24 Delta islands, would you think that the borrow fill
- 25 sites would be likely to fill with water?

- 1 WITNESS WILLIAMS: Yes.
- 2 MS. MESERVE: And would you have any concerns
- 3 about those pits filling with water?
- 4 WITNESS WILLIAMS: Yes.
- 5 MS. MESERVE: What are those?
- 6 WITNESS WILLIAMS: What?
- 7 MS. MESERVE: What would your concerns be if
- 8 they filled with water?
- 9 WITNESS WILLIAMS: Water and whatever was
- 10 seeping out of the ground surrounding them, yes, in the
- 11 groundwater.
- MS. MESERVE: So are you concerned that the
- 13 excavation of those borrow pits could lead to transport
- 14 of hazardous materials, for instance?
- 15 WITNESS WILLIAMS: I would be quite concerned
- 16 about them, both from the fact that the overburden
- 17 would most likely be usable for fill and would be
- 18 stored somewhere on the site, and any leaching from
- 19 that would pass through into the underlying groundwater
- 20 and eventually into the borrow pit itself.
- 21 MS. MESERVE: On Page 26 of your testimony,
- 22 you talk about the effects of placement of --
- 23 (Exhibit displayed on screen.)
- MS. MESERVE: -- tunnel muck in borrow pits.
- 25 And you refer to Page 46 of the ITP.

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1 And maybe if we could, Mr. Hunt, bring that
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- 2 up. That's SWRCB-107.
- WITNESS WILLIAMS: 46 or 45?
- 4 CO-HEARING OFFICER DODUC: You referenced
- 5 both.
- 6 MS. MESERVE: Okay. Yeah. It goes on two
- 7 pages, the requirements pertaining to the pits.
- 8 WITNESS WILLIAMS: Yeah.
- 9 (Exhibit displayed on screen.)
- 10 MS. MESERVE: It's .pdf Page 46 also.
- 11 (Exhibit displayed on screen.)
- MS. MESERVE: And if we go, yes, on to 46.
- 13 Is that 45?
- 14 (Exhibit displayed on screen.)
- 15 MS. MESERVE: Okay. So looking at -- I think
- 16 you were referring in your testimony to the fourth
- 17 bullet down that mentions an impervious liner --
- 18 WITNESS WILLIAMS: Yes.
- 19 MS. MESERVE: -- in your testimony.
- 20 And what's your understanding of the term
- 21 "impervious" in this context?
- 22 WITNESS WILLIAMS: 10 to the minus 16
- 23 centimeters per second.
- MS. MESERVE: And that was 10 to the minus 60?
- 25 WITNESS WILLIAMS: 16 centimeters per second.

- 1 Permeability of the material.
- 2 MS. MESERVE: So, in your experience, is there
- 3 such a thing as impervious where there is no flow at
- 4 all?
- 5 WITNESS WILLIAMS: Effectively, 10 to the
- 6 minus 16 is accepted by EPA and others for hazardous
- 7 material storage.
- 8 MS. MESERVE: But the ITP doesn't actually
- 9 give a numeric value; does it?
- 10 WITNESS WILLIAMS: At least I have used, I
- 11 might say, one-eighth inch Gundle HDPE liners on the
- 12 entire subway system of downtown L.A., and it was
- 13 considered to be impervious at the time.
- 14 Again, it's a matter as to a liner needs to be
- 15 there and must be resilient to the chemicals that are
- 16 going to be exposed and, effectively, it has to be
- 17 impervious.
- 18 10 to the minus 13, I believe, centimeters per
- 19 second is a very, very long time.
- 20 MS. MESERVE: You had, I think -- Just to
- 21 clarify: You're saying 10 to the minus 13 is what
- 22 you --
- 23 CO-HEARING OFFICER DODUC: Hold on.
- MS. MESERVE: -- considered?
- 25 CO-HEARING OFFICER DODUC: Hold on.

- I can hear the objection now, but I'll let
- 2 Miss Ansley voice it.
- 3 MS. ANSLEY: Yes. I'm saying that this is
- 4 wandering beyond the scope.
- 5 He indeed, on Page 26, mentions impervious
- 6 material in the citation to the ITP, that impervious
- 7 material's required. But at no point did he provide
- 8 testimony about impervious material, impervious
- 9 material standards, and what would be expected in the
- 10 Cal WaterFix.
- 11 CO-HEARING OFFICER DODUC: I believe his
- 12 testimony was focused on its relation to the
- 13 groundwater table.
- 14 Was that --
- 15 WITNESS WILLIAMS: Well, if materials are
- 16 going to be placed on top of it --
- 17 CO-HEARING OFFICER DODUC: Yes.
- 18 WITNESS WILLIAMS: -- that's one thing. If
- 19 it's surrounding, it's --
- 20 CO-HEARING OFFICER DODUC: Well --
- 21 WITNESS WILLIAMS: I'd say it's the same
- 22 thing.
- 23 CO-HEARING OFFICER DODUC: Yes.
- 24 WITNESS WILLIAMS: Just to isolate whatever's
- 25 going to be in there.

- 1 CO-HEARING OFFICER DODUC: Thank you, yes.
- 2 That was the extent of his testimony, so that
- 3 objection is sustained.
- 4 MS. MESERVE: I believe the question was
- 5 answered, so as long as you're not saying anything
- 6 stricken; correct?
- 7 He -- He stated his understanding of what
- 8 "impervious" meant, which was what I was looking for.
- 9 CO-HEARING OFFICER DODUC: You were going for
- 10 a more specific number there, Miss Meserve --
- MS. MESERVE: No, I --
- 12 CO-HEARING OFFICER DODUC: -- which is why
- 13 Miss Ansley objected.
- 14 So let's move on.
- 15 MS. MESERVE: The reason I asked the question
- 16 is, actually he had said 10 to the minus 16 --
- 17 WITNESS WILLIAMS: Yeah.
- MS. MESERVE: -- in his initial response and,
- 19 then, later said 10 to the minus 13.
- 20 So I was just trying to determine which number
- 21 he intended he used.
- 22 CO-HEARING OFFICER DODUC: Whichever the
- 23 number is, it is outside the scope of his testimony.
- Unless, Dr. Williams, you can point me to
- 25 where in your testimony you discuss the

- 1 imperviousness --
- 2 WITNESS WILLIAMS: I did not define
- 3 "impervious."
- 4 CO-HEARING OFFICER DODUC: Thank you.
- 5 MS. MESERVE: Okay. I have a few questions
- 6 for Dr. Jahns (sic).
- 7 Looking first in your testimony, Dr. Jahns
- 8 (sic) --
- 9 WITNESS JAHN: It's Jahn. There's no S.
- 10 MS. MESERVE: I'm sorry. I'm the one who
- 11 messed it up.
- 12 On Page 14, Line 11, you refer to eight
- 13 experiments that were discussed in the Gringas (sic)
- 14 study.
- 15 WITNESS JAHN: Gingras? Yes.
- MS. MESERVE: And why do you feel those
- 17 studies were insufficient?
- 18 WITNESS JAHN: The -- The work was done by a
- 19 number of authors. It was just summarized by Gingras.
- 20 There are only eight experiments that look at
- 21 Salmon. In those experiments, there were nine
- 22 different values of the efficiency of the plant used to
- 23 calculate the pre-screen loss.
- 24 Some of those values -- One of the values was
- 25 as low as 0.25. Nobody knows what value ought to be

- 1 used. There haven't been enough repetitions of the
- 2 pre -- of the pre-screen -- of the efficiency of the
- 3 plant, the guide fish, so that any particular number
- 4 can be chosen.
- 5 And so his -- his estimates of -- of
- 6 pre-screen mortality, even though they resulted in --
- 7 in about 85 percent loss before the animals even get to
- 8 the trash racks, there was, I think, an insufficient
- 9 number of repetitions.
- 10 Some of the methods are a little bit suspect.
- 11 The fish weren't counted in all cases. They were
- 12 weighed, and the number of fish were sort of
- 13 extrapolated from that.
- 14 There's a lot in there that hasn't been
- 15 explained by Gingras' report, and no one, including
- 16 myself, has burrowed down to the reports on which his
- 17 summary is based.
- 18 MS. MESERVE: And also on Page 14, Lines 14
- 19 and 15, you recommend new work to simplify the
- 20 expansion calculation.
- 21 Is that new work, is that something that has
- 22 been undertaken, or do you know the status?
- 23 WITNESS JAHN: The Bureau of Reclamation
- 24 responded to National Marine Fisheries about that, and
- 25 they -- they agree with some of my recommendations, but

- 1 that one, they disagreed with.
- 2 They didn't explain their basis of their
- 3 disagreement. They simply asserted that, in order what
- 4 I suggested, they would have to shut down the plant
- 5 entirely, and that makes no sense to me, and I think
- 6 it's just stonewalling.
- 7 MS. MESERVE: Are you saying they said you'd
- 8 have to shut down diversions in order to do the test?
- 9 Is that what --
- 10 WITNESS JAHN: Yeah. They didn't try to
- 11 explain themselves in the letter.
- MS. MESERVE: So the response you received
- 13 didn't -- you didn't believe was explanatory.
- 14 WITNESS JAHN: The response was made to the
- 15 National Marine Fisheries Service and it wasn't to me.
- 16 And I was no longer under a contract with anybody, so I
- 17 stayed out of it.
- But the -- It didn't -- I haven't seen any
- 19 evidence that the National Marine Fisheries Service
- 20 responded to that first point in the letter from the
- 21 record.
- 22 CO-HEARING OFFICER DODUC: Could we hold on a
- 23 second, please.
- The gong sound has stopped. Okay. I didn't
- 25 know if that was an emergency.

1 CO-HEARING OFFICER MARCUS: It might have been

- 2 on a different floor.
- 3 CO-HEARING OFFICER DODUC: All right. Sorry.
- 4 MS. MESERVE: On the following page, Page 15,
- 5 Lines -- Line 16, you're discussing the losses at the
- 6 existing facilities still.
- 7 And you mention, given the track records of
- 8 DWR and especially the Bureau, you wouldn't think this
- 9 will ever happen.
- 10 And I'm wondering, what track records are you
- 11 talking about?
- 12 WITNESS JAHN: I'm having a little trouble
- 13 with my papers here.
- Oh, here you are.
- Page 15, you said?
- MS. MESERVE: Yeah. It's on Page 15 and,
- 17 then, the paragraph begins at Line 9 but the track
- 18 record comment is on Line 16.
- 19 WITNESS JAHN: Oh, yeah.
- 20 Well, all the way back to 2006, Williams
- 21 recommended that they, you know, question the validity
- 22 of the pre-screen loss estimates and -- and noted, I
- 23 think, that -- I think he also noted at that time that
- 24 there were no pre-screen losses at the Federal Project,
- 25 the CVP.

- 1 And he suggested at that time that those
- 2 things should be done better and -- and produce some
- 3 more valid estimates.
- 4 MS. MESERVE: And -- But why do you think
- 5 they'll never happen?
- 6 WITNESS JAHN: I have seen reports from the
- 7 Bureau of Reclamation where there are scatter plots
- 8 with no scatter. They just write a -- a regression
- 9 line, an equation. I asked the author why that was,
- 10 and he told me his boss told him to take out the data
- 11 points.
- 12 I -- I have been stonewalled by the
- 13 suggestions that I make, a lot of them, and I just
- 14 think that the management there is too much in charge
- 15 of the science.
- MS. MESERVE: And do you think that would be a
- 17 risk with the Proposed Project that's the subject of
- 18 this Petition?
- 19 WITNESS JAHN: I think if you --
- 20 CO-HEARING OFFICER DODUC: Hold on, please.
- 21 Hold on.
- 22 Miss Sheehan is running up to the microphone.
- MS. SHEEHAN: I would object as to vague. I
- 24 don't know what the questioner's referencing. I
- 25 believe she said "that."

- 1 Could you please clarify the question?
- 2 CO-HEARING OFFICER DODUC: Miss Ansley.
- 3 MS. ANSLEY: Just to add: I also believe that
- 4 he is not presenting an opinion as to the California
- 5 WaterFix, as to this Project. His testimony is
- 6 confined to critiquing Dr. Hanson's testimony on
- 7 existing conditions.
- 8 So I believe, if I heard Meserve's question --
- 9 Miss Meserve's question correctly, she was asking about
- 10 a risk in terms of this Project.
- 11 CO-HEARING OFFICER DODUC: Miss Meserve, would
- 12 you like to clarify your question? I didn't say
- 13 restate. I just said clarify.
- 14 MS. MESERVE: Yes. I think I could ask it as
- 15 a hypothetical question.
- 16 CO-HEARING OFFICER DODUC: (Nodding head.)
- 17 Try asking.
- 18 MS. MESERVE: Okay. So, Dr. Jahn, you stated
- 19 concern here about the -- the studies never happening
- 20 because of the track record that you're familiar with
- 21 the Bureau and DWR.
- 22 With respect to if the DWR and the Bureau had
- 23 different facilities in the Delta, does your
- 24 understanding of their track record for conducting the
- 25 kinds of studies you're discussing here on Page 15,

1 would you have any confidence that those studies would

- 2 be conducted?
- 3 MS. ANSLEY: Objection: Vague and ambiguous
- 4 as to any other facilities in the Delta they might
- 5 construct. I think that's an incomplete hypothetical
- 6 that's vague and ambiguous. Yes, it's also vague and
- 7 ambiguous as to what studies and then -- or what type
- 8 of studies.
- 9 And, then, also, this is the beyond the scope
- 10 of Dr. Jahn's testimony, frankly, to opine on impacts
- 11 of potential future facilities, even in the context of
- 12 a hypothetical, which I understand is now trying to get
- 13 around asking about the California WaterFix.
- 14 His testimony's on existing conditions and
- 15 critique of Dr. Hanson's testimony.
- 16 CO-HEARING OFFICER DODUC: Miss Meserve, your
- 17 response?
- MS. MESERVE: I -- What my understanding of
- 19 his testimony is that he is also opining as to the
- 20 ability and willingness of the DWR and the Bureau to
- 21 undertake studies of their facilities.
- 22 So I am asking him as an expert about that
- 23 impression he has as might be applied to a different
- 24 facility than is discussed here.
- MS. ANSLEY: And, specifically, he's

1 testifying about pre-screen indirect mortality related

- 2 to the pumps.
- 3 CO-HEARING OFFICER DODUC: I understand what
- 4 what's he talk -- what he is testifying to,
- 5 Miss Ansley.
- I also understand Miss Meserve's line of
- 7 questioning in applying his understanding and his
- 8 experience with respect to these studies to other
- 9 studies that Petitioners have committed to conducting
- 10 as part of the Petition before us.
- 11 So I'm overruling your objection, but I will
- 12 say it will go towards weight.
- 13 Miss Meserve.
- MS. ANSLEY: And I'd like to add, then, lack
- 15 of foundation regarding his knowledge of whatever
- 16 hypothetical we're now going to go into of facilities.
- 17 CO-HEARING OFFICER DODUC: He -- She did ask
- 18 him question about what he meant by "track record," so
- 19 she has established the foundation such as it was.
- 20 Do you need to have the question repeated by
- 21 this time, Dr. Jahn?
- 22 WITNESS JAHN: I think that would be a good
- 23 idea.
- 24 CO-HEARING OFFICER DODUC: Yes.
- 25 (Pause in proceedings.)

1 CO-HEARING OFFICER DODUC: Miss Meserve, if I

- 2 might.
- 3 Dr. Jahn, based on your experience, given your
- 4 testimony here on Line 16, would you have any concerns
- 5 about DWR and the Bureau completing studies as
- 6 committed to during this process? If you are familiar
- 7 with any of those commitments.
- 8 I think that's what you were trying to get at,
- 9 Miss Meserve.
- 10 MS. MESERVE: Yes. I think it's not
- 11 particular to -- You know, it doesn't need to -- I
- 12 understand the scope of the testimony and, yeah, I
- 13 don't think it needs to be particular to specific
- 14 studies.
- 15 It's just studies like the ones he's commented
- 16 on here would be the only modification I'd make to --
- 17 CO-HEARING OFFICER DODUC: Okay.
- 18 MS. MESERVE: -- the way you phrased it.
- 19 CO-HEARING OFFICER DODUC: So just the
- 20 study -- just those studies then.
- 21 MR. BERLINER: Just for the record, I know
- 22 it's always risky to object to a Judge or Hearing
- 23 Officer's question, but we do have to protect the
- 24 record.
- 25 My objection is lack of foundation to that

- 1 question because this witness, other than mentioning
- 2 before that he talked to one unnamed person at the
- 3 Bureau, has not laid a foundation as to how he would
- 4 have knowledge about whether DWR or the Bureau would do
- 5 anything.
- 6 CO-HEARING OFFICER DODUC: Understood, which
- 7 is why it goes to weight.
- 8 At this time, I don't think Dr. Jahn even
- 9 remembers the question anymore.
- 10 Miss Meserve, do you want to try again?
- MS. MESERVE: Would it be helpful to rephrase
- 12 it again, Dr. Jahn, or is . . .
- 13 WITNESS JAHN: No, I don't think so.
- I mean . . . I agree. I'm not a
- 15 psychologist. I just have seen what's been happening.
- 16 These guys have been operating the Bureau of Rec for,
- 17 what, 60 years and they still don't know what
- 18 pre-screen loss is.
- 19 If you think they're ever going to note --
- 20 study that without being forced, then you're
- 21 delusional. And so that's my opinion. That's not
- 22 science. That's just what I -- what I observed.
- 23 CO-HEARING OFFICER DODUC: And we will give it
- 24 the proper weight.
- Miss Meserve.

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1 MS. MESERVE: And just to clarify the weight
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- 2 we might afford it.
- 3 How many years experience do you have working
- 4 with the Bureau and the Department of Water Resources?
- 5 WITNESS JAHN: One.
- 6 MR. BERLINER: Objection.
- 7 MS. MESERVE: Sorry? Is.
- 8 CO-HEARING OFFICER DODUC: Well, the answer is
- 9 only -- I'm sorry.
- 10 Mr. Berliner, what is your objection?
- 11 MR. BERLINER: Objection as to relevance.
- 12 This question, again, there's no foundation, no
- 13 perspective, whatever time he may or may not have been
- 14 spent working with the Bureau. There's no quality as
- 15 to that, as to in what respect. I can go --
- 16 CO-HEARING OFFICER DODUC: It goes to weight.
- 17 And I believe, Dr. Jahn, your answer was one
- 18 year?
- 19 WITNESS JAHN: Yes.
- 20 CO-HEARING OFFICER DODUC: Thank you.
- 21 (Pause in proceedings.)
- MS. MESERVE: Going to Page 20 of your
- 23 testimony.
- 24 You're discussing the --
- 25 (Exhibit displayed on screen.)

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1 MS. MESERVE: -- winter-run Chinook, and you
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- 2 pose a question about whether the -- the second
- 3 question, whether the 2010 Delta Flow Criteria are
- 4 clearly overprotective.
- 5 When you think of the 2010 Delta Flow
- 6 Criteria, what's the geographic extent of those flow
- 7 criteria that your understanding reflects.
- 8 WITNESS JAHN: My understanding is that
- 9 they're asking for a reduction in the negativity of Old
- 10 and Middle River flows, net flows, of minus 2500 cubic
- 11 feet per second.
- 12 CO-HEARING OFFICER DODUC: Okay. I don't
- 13 understand the answer now.
- MS. MESERVE: I don't, either.
- 15 CO-HEARING OFFICER DODUC: Miss Meserve, I
- 16 think you need to ask the question again.
- 17 MS. MESERVE: The . . . Your testimony
- 18 pertains to the 2010 flow criteria recommendations, at
- 19 least this portion of it.
- 20 And you answer your own question that it's
- 21 probably not overprotective, the 2010 flow criteria.
- 22 And my question is: When you think of the
- 23 flow criteria that pertain to the winter-run Chinook,
- 24 are you just -- you answered with respect to OMR.
- 25 Is that your only understanding of the

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1 recommendations of the Flow Criteria Report?
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- 2 WITNESS JAHN: I don't have a detailed
- 3 knowledge of the Flow Criteria Report, if that's what
- 4 you're getting at.
- 5 MS. MESERVE: All right.
- 6 On the next page of your testimony, 21 --
- 7 (Exhibit displayed on screen.)
- 8 MS. MESERVE: -- you mention at the bottom the
- 9 West Coast Salmon Fishery is -- has been in decline,
- 10 and you suggest a precautionary approach.
- When you discuss a precautionary approach,
- 12 would that include Salmon that aren't yet listed?
- 13 (Pause in proceedings.)
- 14 WITNESS JAHN: The Salmon tend to migrate out
- 15 in the spring.
- 16 The criteria that would protect the winter-run
- 17 would protect virtually all of them, and I -- all of
- 18 them to some extent at least. And so, to that extent,
- 19 yeah.
- 20 MS. MESERVE: So, you understand the Salmon
- 21 fishery is -- involves an array of Salmon, some of
- 22 which are listed and some of which not, and you are
- 23 suggesting a precautionary principle to protect all
- 24 those Salmon; is that correct?
- 25 WITNESS JAHN: That's correct.

- 1 MS. MESERVE: Thank you.
- 2 CO-HEARING OFFICER DODUC: Do you wish to
- 3 request any redirect?
- 4 MS. KRIEG: (Nodding head.)
- 5 CO-HEARING OFFICER DODUC: On what particular
- 6 area, Miss Krieg?
- 7 MS. KRIEG: I wanted to ask just a question of
- 8 Dr. Jahn regarding Figure 4.
- 9 CO-HEARING OFFICER DODUC: All right.
- 10 REDIRECT EXAMINATION BY
- 11 MS. KRIEG: And, specifically, I was hoping
- 12 that he could just speak quickly as to the purpose of
- 13 Figure 4 in his testimony since Miss Ansley asked about
- 14 the . . . the R2.
- 15 CO-HEARING OFFICER DODUC: Didn't he already
- 16 answer that in answering her question?
- 17 WITNESS JAHN: Are you asking me?
- 18 CO-HEARING OFFICER DODUC: Yes.
- 19 WITNESS JAHN: I've got a little more to say
- 20 about that.
- MS. KRIEG: Well, I'd like to lodge an
- 22 objection. I don't know if I even heard a question
- 23 there. She said I'd like to hear him speak more on
- 24 Figure 4.
- MS. KRIEG: I'm pretty sure I said that I

- 1 would like him to explain the purpose of --
- 2 CO-HEARING OFFICER DODUC: That was her
- 3 question. Explain the purpose.
- 4 Dr. Jahn, if you have more to add.
- 5 WITNESS JAHN: Yes. The -- The purpose
- 6 of presenting this Figure 4 was not to imply that the
- 7 analysis I've done here is something that I'm
- 8 recommending.
- 9 The purpose is simply to show that, with a
- 10 more -- what shall I say? -- exploratory attitude, that
- 11 Dr. Hanson could have found a stronger relationship
- 12 than the sort of shotgun pattern that appears in
- 13 Figure 3.
- 14 It's a . . . I don't think it's the right
- 15 approach to the data.
- 16 The only advantage is that you can see it. If
- 17 you look at the report by -- the published report by
- 18 Zeug and Cavallo, if I'm pronouncing those names right,
- 19 you get tables of R-squares and probabilities and so
- 20 on, but there's nothing you can really look at.
- 21 And so the -- the scatter plot has that -- has
- 22 that advantage. You can explain it to your mother.
- 23 But it's not the right way to analyze these data.
- 24 CO-HEARING OFFICER DODUC: No, I cannot
- 25 explain it to my mother.

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1 (Laughter.)
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- 2 CO-HEARING OFFICER DODUC: I love her too much
- 3 to do that.
- 4 (Laughter.)
- 5 WITNESS JAHN: Well, anyway, it was just to
- 6 point out that -- just to demonstrate that Hanson's
- 7 testimony is not really aimed at informing you but,
- 8 rather, it . . . supporting this argument there's --
- 9 that there's so much uncertainty out there.
- 10 CO-HEARING OFFICER DODUC: Thank you.
- 11 Any recross?
- MS. DES JARDINS: Excuse me.
- 13 CO-HEARING OFFICER DODUC: Hold on.
- MS. DES JARDINS: I also had some recross
- 15 potentially for -- I mean, yeah, redirect for Dr. Jahn.
- 16 CO-HEARING OFFICER DODUC: Hold on. Let me
- 17 finish.
- 18 MS. DES JARDINS: All right.
- 19 CO-HEARING OFFICER DODUC: Any recross of
- 20 Dr. Jahn?
- MS. DES JARDINS: Oh, okay.
- MS. ANSLEY: No.
- 23 CO-HEARING OFFICER DODUC: No?
- 24 All right. Any redirect for Dr. Williams?
- MS. DES JARDINS: Okay. Thank you.

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1 I'd like to ask if --
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- 2 CO-HEARING OFFICER DODUC: Hold on. Hold on.
- 3 MS. DES JARDINS: Okay.
- 4 CO-HEARING OFFICER DODUC: What issue will you
- 5 be redirecting him on?
- 6 MS. DES JARDINS: I wanted to see if I could
- 7 confer briefly with Dr. Williams and see if there's a
- 8 correction he'd like to make about Page 6 of his
- 9 testimony on sheer strength and consolidated tests,
- 10 and -- if that's possible.
- 11 CO-HEARING OFFICER DODUC: You -- You may --
- MS. ANSLEY: She's supposed to ask questions.
- 13 CO-HEARING OFFICER DODUC: Hold on. Hold on.
- I know that we are getting close to 5:00 and
- 15 everybody's getting nervous, but chill, please.
- Miss Des Jardins if your request is to conduct
- 17 redirect of Dr. Thomas (sic) on that particular topic,
- 18 that is granted.
- 19 If your request is to consult with
- 20 Dr. Williams, that is not granted.
- 21 MS. DES JARDINS: Okay.
- 22 CO-HEARING OFFICER DODUC: But you may conduct
- 23 redirect.

24

25

- 1 REDIRECT EXAMINATION BY
- 2 MS. DES JARDINS: Dr. Williams, is there any
- 3 correction you would like to make at this point to
- 4 Page 6 of your testimony concerning the relationship
- 5 between sheer strength and consolidated strength, or
- 6 with respect to --
- 7 WITNESS WILLIAMS: Just on the --
- 8 MS. DES JARDINS: -- tests?
- 9 Let me see just a minute. Is that the correct
- 10 page?
- 11 Yeah. The -- Excuse me. It's Page 7 of your
- 12 testimony.
- 13 (Exhibit displayed on screen.)
- 14 WITNESS WILLIAMS: At this time, no.
- MS. DES JARDINS: Okay. Thank you very much.
- 16 CO-HEARING OFFICER DODUC: I assume there's no
- 17 recross, either.
- 18 All right. At this point, do you wish to move
- 19 your exhibits into the record on behalf of -- Well,
- 20 we'll start with PCFFA.
- MS. KRIEG: Yes. I mean, they're all listed
- 22 as --
- 23 CO-HEARING OFFICER DODUC: All right. Or DDJ,
- 24 either one or both.
- MS. DES JARDINS: I would like to move the

- 1 exhibits listed in my Exhibit List into the record.
- 2 CO-HEARING OFFICER DODUC: Any objections?
- 3 MS. KRIEG: No.
- 4 CO-HEARING OFFICER DODUC: In that case, we
- 5 will accept them into the record.
- 6 (California Water Research Exhibits received in
- 7 evidence)
- 8 (Pacific Coast Federation of Fishermens Associations
- 9 and Institute for Fisheries Resources' Exhibits
- 10 received in evidence)
- 11 CO-HEARING OFFICER DODUC: Thank you,
- 12 Dr. Williams, and thank you, Dr. Jahn.
- 13 WITNESS WILLIAMS: You're welcome.
- 14 CO-HEARING OFFICER DODUC: All right. With
- 15 that -- Boy, you guys can be efficient when I threaten
- 16 to make you stay till 6:00 and continue on Friday.
- 17 With that, then, we will adjourn and resume
- 18 Friday at 9:30.
- 19 Are we in this room again? Could someone
- 20 confirm quickly?
- 21 And just a reminder: We will hear from
- 22 Clifton Court.
- We will hear from, oh, my favorite
- 24 photographer Mr. Wirth for Save Our Sandhill Cranes.
- We will also hear from Mr. Bednarski and

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1 Mr. -- and Dr. Chilamkuri, and that will be, I think,
 2 the extent of Friday.
 3
             Any question? Any housekeeping matter?
 4
             Seeing none.
 5
             All right. Thank you all. We will see you on
 6 Friday.
 7
              (Proceedings adjourned at 4:30 p.m.)
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State of California
   County of Sacramento
 2
 3
         I, Candace L. Yount, Certified Shorthand Reporter
 4
    for the State of California, County of Sacramento, do
 5
   hereby certify:
 7
         That I was present at the time of the above
   proceedings;
 8
 9
         That I took down in machine shorthand notes all
   proceedings had and testimony given;
10
11
         That I thereafter transcribed said shorthand notes
   with the aid of a computer;
12
         That the above and foregoing is a full, true, and
13
    correct transcription of said shorthand notes, and a
14
    full, true and correct transcript of all proceedings
15
   had and testimony taken;
16
17
         That I am not a party to the action or related to
    a party or counsel;
18
         That I have no financial or other interest in the
19
20
   outcome of the action.
21
   Dated: October 2, 2018
22
23
24
                        Candace L. Yount, CSR No. 2737
25
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1	STATE OF CALIFORNIA)
2	COUNTY OF MARIN)
3	I, DEBORAH FUQUA, a Certified Shorthand
4	Reporter of the State of California, do hereby
5	certify that the foregoing proceedings (Pages 1
6	through 108) were reported by me, a disinterested
7	person, and thereafter transcribed under my
8	direction into typewriting and which typewriting is
9	a true and correct transcription of said
10	proceedings.
11	I further certify that I am not of counsel
12	or attorney for either or any of the parties in the
13	foregoing proceeding and caption named, nor in any
14	way interested in the outcome of the cause named in
15	said caption.
16	Dated the 3rd day of October, 2018.
17	
18	
19	DEBORAH FUQUA
20	CSR NO. 12948
21	
22	
23	
24	
25	