1 BEFORE THE 2 CALIFORNIA STATE WATER RESOURCES CONTROL BOARD 3 4 CALIFORNIA WATERFIX WATER) RIGHT CHANGE PETITION HEARING) 5 6 JOE SERNA, JR. BUILDING 7 CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY 8 COASTAL HEARING ROOM 9 1001 I STREET 10 SECOND FLOOR 11 SACRAMENTO, CALIFORNIA

i

13PART 2 REBUTTAL	
14	
15 Friday, August 17, 2018	
16 9:30 a.m.	
17	
18 Volume 44	
19 Pages 1 - 241	
20	
21 Reported By: Candace Yount, CSR No. 2737, RMR,	CCRR
(a.m. session)	
22 Deborah Fuqua, CSR No. 12948 (p.m. session)	
(p.m. session) 23	
24 Utilizing Computer-Aided Transcription	
25	
California Reporting, LLC - (510) 224-44	176
www.CaliforniaReporting.com	

```
1
                          APPEARANCES
 2
   CALIFORNIA WATER RESOURCES BOARD
 3
   Division of Water Rights
 4
   Board Members Present:
 5
    Tam Doduc, Co-Hearing Officer
 6 Felicia Marcus, Chair & Co-Hearing Officer
   Dorene D'Adamo, Board Member
7
    Staff Present:
 8
   Andrew Deeringer, Senior Staff Attorney
 9 Conny Mitterhofer, Supervising Water Resource Control
    Engineer (a.m.)
10 Jean McCue, Sr. Water Resources Control Engineer (p.m.)
11 Thaddeus Hunt
```

12 PART 2 REBUTTAL

ii

13 For Petitioners:

14 California Department of Water Resources:

```
15 James (Tripp) Mizell
```

Jolie-Anne Ansley

```
16 Thomas Berliner
```

17 The U.S. Department of the Interior:

18 Amy L. Aufdemberge, Esq.

19

20

21

22

23

24

25

California Reporting, LLC - (510) 224-4476

```
1
                    APPEARANCES (Continued)
 2
           FOR PROTESTANTS AND INTERESTED PARTIES:
 3 For Central Delta Water Agency, South Delta Water
    Agency (Delta Agencies), Lafayette Ranch, Heritage
 4 Lands Inc., Mark Bachetti Farms and Rudy Mussi
    Investments L.P.:
 5
    Dean Ruiz
 б
    For State Water Contractors:
7
    Stefanie Morris
 8
    For California Water Research:
 9
    Deirdre Des Jardins
10
    For County of San Joaquin, et al.:
11
    Thomas H. Keeling
```

For Friends of Stone Lake and Local Agencies of the

12

iii

13 North Delta, et al. (LAND):

14 Osha Meserve

15 San Luis & Delta-Mendota Water Authority:

16 Hans-Peter Walter

17 For Sacramento County Water Agency, Glenn-Colusa Irrigation District, Biggs-West Gridley Water District,

18 Carmichael Water District as well as Placer County Water Agency and the County of Sacramento:

19

Aaron Ferguson

20

For Contra Costa County and Contra Costa County Water

21 Agency:

- 22 Stephen Siptroth
- 23 For The City of Brentwood:

24 David Aladjem

25

California Reporting, LLC - (510) 224-4476

1	APPEARANCES (Continued)
2	FOR PROTESTANTS AND INTERESTED PARTIES:
3	For The City of Roseville, Sacramento Suburban Water
	District, San Juan Water District, and The City of
4	Folsom:
5	Ryan Bezerra
б	
7	
8	
0	
9	
10	
11	

12

iv

-	1 1
	≺
-	

14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
	California Reporting, LLC - (510) 224-4476

1			I	N	D	Ε	Х				
2	W	I	Т	N	E	S	S	E	S		

- 3 CENTRAL DELTA WATER AGENCY, SOUTH DELTA WATER AGENCY (DELTA AGENCIES), LAFAYETTE RANCH, HERITAGE LANDS INC.,
- 4 MARK BACHETTI FARMS AND RUDY MUSSI INVESTMENTS L.P., COUNTY OF SAN JOAQUIN, AND COUNTY OF SACRAMENTO, ET
- 5 AL.:
- 6 WITNESSES

PAGE VOL.

MICHAEL, JEFFREY

- 7 (Previously Sworn)
 Direct examination by Mr. Ruiz 27 44
 8 Cross-examination by Mr. Berliner 49 44
- Cross-examination by Ms. Des Jardins 80 44 9 Cross-examination by Ms. Meserve 88 44
- 10 CONTRA COSTA COUNTY AND CONTRA COSTA COUNTY WATER AGENCY AND SOLANO COUNTY:
- 11

```
WITNESSES
```

PAGE VOL.

12 DENTON, RICHARD (Previously Sworn) Direct examination by Mr. Siptroth 130 44

13	Cross-examination	by	Mr.	Bezerra	148	44
	Cross-examination	by	Ms.	Morris	156	44
14	Cross-examination	by	Mr.	Aladjem	178	44
	Cross-examination	by	Mr.	Ruiz	207	44
15	Cross-examination	by	Ms.	Des Jardins	213	44
	Cross-examination	by	Mr.	Ferguson	220	44
16	Cross-examination	by	Ms.	Meserve	227	44

17 CONTRA COSTA COUNTY, CONTRA COSTA COUNTY WATER AGENCY, AND SOLANO COUNTY:

18

	EXHIBITS	IDEN	EVID	VOL.
19				
	CCC-SC-50		238	44
20	CCC-SC-51-Errata		239	44
	CCC-SC-52 through CCC-SC-55		238	44
21	CCC-SC-56-Errata		238	44
	CCC-SC-57 through CCC-SC-67		238	44

22

23

24

25

California Reporting, LLC - (510) 224-4476

1 Friday, August 17, 2018 9:30 a.m. 2 PROCEEDINGS ---000---3 4 CO-HEARING OFFICER DODUC: All right. Good 5 morning, everyone. It is 9:30 on a Friday. Welcome 6 back to this Water Right Change Petition hearing for 7 the California WaterFix Project. 8 I am Tam Doduc. To my right is Board Chair 9 and Co-Hearing Officer Felicia Marcus. I believe we 10 will be joined shortly by Board Member Dee Dee D'Adamo. 11 To my left are Andrew Deeringer and Conny Mitterhofer. We're being assisted today by Mr. Hunt. 12

13 I see mostly familiar faces, so I'll quickly

If an alarm sounds, follow everybody. Speak

14 go through the three announcements.

15

16 into the microphone after making sure that the green 17 light is lit because that indicates that it's on. And, 18 finally and most importantly, take a moment and put all 19 your noise-making devices to silent, vibrate, do not 20 disturb. All right. Housekeeping matters. I believe, 21 22 Miss Morris and Mr. Ruiz, we have something to discuss. 23 Mr. Ruiz, let's begin with you. 24 MR. RUIZ: Okay. Thank you. 25 Good morning. Dean Ruiz for the South Delta

California Reporting, LLC - (510) 224-4476

1 Water Agency parties.

2 Yesterday, Miss Morris asked, sometime before 3 noon, for a clarification -- or pointed out an inconsistency between a table and a map that Mr. Burke 4 5 had included in his testimony, and asked if we could do 6 an errata to that, which we agreed to and put on the 7 record. 8 At about the same time, some -- around that 9 time or lunchtime, Mr. Burke sent me a message 10 indicating that there was -- appeared to be a problem

11 with his testimony and we needed to discuss that.

12 When I got back -- When I left here for those

13 purposes to work on the errata and, in getting back to

14 the office and talking to Mr. Burke, he pointed out

15 a -- an error that he found in doing his final

16 preparation to come here and testify with regard to the

17 base survey assumptions he made with respect to NAVD 88

18 and the NVGD 29, which results in -- results in a bit

19 of a calculation error.

20 By the time I got back and fully figured out

21 what it meant and what it was, I sent out an e-mail

22 that everybody's seen explaining the situation and

23 indicated that errata -- an additional errata in --

24 in -- incorporating those changes to those specific

25 graphs or charts that he prepared would be forthcoming.

California Reporting, LLC - (510) 224-4476 www.CaliforniaReporting.com 1 We sent those. We sent those out about 7 o'clock, as

2 soon as they were prepared.

3 And I just wanted to say it's a difficult

4 situation, obviously, and Mr. Burke regrets the error,

5 but it put me in a position where he tells me in the

6 afternoon there's a problem, and it actually lessens

7 the impact of his testimony to Petitioners.

8 It's the same issue. It just changes the --

9 the impact somewhat in terms of the difference between

10 the DSM-II channels and the actual channels that we

11 surveyed recently in connection with this matter and --

12 and for other reasons.

14 I wouldn't have done -- come here under

15 cross-examination during the -- what would probably

16 have been the expected "aha" moment. "Mr. Burke, do

17 you realize your assumptions with regard to the base

18 survey data is wrong?" And he would say, "Yes, I

19 figured it out yesterday," and then we'd have this big

20 messy back and forth.

21 So, obviously, I -- As soon as I could -- I

22 dealt with it as soon as I could and -- and -- and

23 submitted it, and that's what we have.

24 So, we have -- It's -- It's six or eight

25 charts within his testimony. So we submitted an

California Reporting, LLC - (510) 224-4476

1 errata, and an errata for his PowerPoint which is the

2 same exact charts.

And the errata includes the -- the original request by Miss Morris, which was, is the map correct or is the table correct? And the table and all the testimony was correct. He just inadvertently included a map from Part 1. So, we included the correct map as part of the errata, and that's where we are at this time.

11 hear from Miss Morris.

12 At some point, though, Mr. Burke, I would -- I

13 would like to better understand the difference between

14 NAVD 88 and N . . .

15 WITNESS BURKE: NGVD --

16 CO-HEARING OFFICER DODUC: . . . GVD --

17 WITNESS BURKE: -- 29.

18 CO-HEARING OFFICER DODUC: -- 29. Thank you.

19 MS. MORRIS: Thank you.

20 I think it's not a surprise that I would

21 object to Mr. Burke changing the underlying data this

22 late in the game after testimony, so I won't repeat

23 those arguments, but I'll just leave that as the

24 objection.

25 I want be clear that I wasn't asking for

California Reporting, LLC - (510) 224-4476

1 correction of bathymetry data. I was asking for a

2 correction of a map that was located and tied to

3 information in Mr. Burke's testimony related to

4 salinity.

5 The changes in the different datum point that

6 he has now changed is an update. And, so, essentially,

7 when you're looking at water levels, you can measure it

8 in two ways:

9 You can measure it from the depth of the

10 channel to the top of the water surface, and that's a

11 measurement you can do.

12

Another measurement -- and the most commonly

13 used when you're making bathymetry measurements -- is

14 to tie that to a reference point, so it's a data

15 reference, which those two data references are relying

16 to. One is an older version, 29, and then there's the

17 other version 89. And there is about a 2.3-foot

18 difference between those data references.

19 So, again, I don't think that this is

20 appropriate. I think it's surprise testimony. And it

21 had nothing to do with the request for the correction I

22 was making to attempt to be more efficient in

23 cross-exam.

24 CO-HEARING OFFICER DODUC: I understand that

25 it was not part of your request which was discussed

California Reporting, LLC - (510) 224-4476

1 yesterday during the hearing, to which we concurred 2 that Mr. Burke would prepare an errata for today. 3 What I will attempt to understand is how 4 significant is this change that Mr. Burke made in terms 5 of the analysis that he's presenting the results, and 6 in terms of what you, Petitioners and others, have to 7 consider and analyze in preparing for 8 cross-examination. 9 Do you have input on that? 10 MS. MORRIS: I do. 11 I fully expected that my motion would be

12 overruled, and so I am prepared to cross-examine -- I

б

13 prepared late last night and this morning -- on the

14 revised document if that's the case. I'm prepared to

15 go today and this morning.

16 CO-HEARING OFFICER DODUC: Others.

17 Miss Des Jardins.

18 MS. DES JARDINS: I would just like to point

19 out that the Hearing Notice does require that the

20 assumptions for the model be documented.

21 And I would like to ask if Petitioners did

22 document this assumption for the DSM-II modeling that

23 was submitted with the modeling. Because if it wasn't,

24 it's very difficult for an expert to guess, and they

25 can -- they can make an error. And it is a 2.3-foot

California Reporting, LLC - (510) 224-4476 www.CaliforniaReporting.com 1 difference.

2 CO-HEARING OFFICER DODUC: We'll acknowledge 3 that and . . . we will not follow up in terms of 4 Miss Des Jardins' request about the modeling because 5 that's outside the scope of the motion that is before 6 us. 7 MR. MIZELL: Tripp Mizell. 8 CO-HEARING OFFICER DODUC: Mr. Mizell. 9 MR. MIZELL: Yes. Tripp Mizell, DWR. 10 It also should come as no surprise the 11 Department joins with Miss Morris, State Water

12 Contractors, in the opposition to the surprise

13 testimony.

14 The change in the baseline data is a 15 significant change. It essentially is the fundamentals 16 of which his opinion is based on and to -- to change 17 that the night before he's to testify is extremely 18 prejudicial to the Department. CO-HEARING OFFICER DODUC: So --19 20 MR. MIZELL: And with that, I think 21 Miss Morris expressed all of our other reasoning. 22 CO-HEARING OFFICER DODUC: Is it my 23 understanding, both of you, that your -- your 24 objection, your opposition, is that a Motion to Strike? 25 What is it exactly? California Reporting, LLC - (510) 224-4476

1 MR. MIZELL: I'll let Miss Morris speak for 2 her motion. 3 CO-HEARING OFFICER DODUC: I -- I will 4 acknowledge that this is a change in testimony at a 5 very late notice. б So what is your request? 7 MS. MORRIS: So, actually, I can't make a 8 Motion to Strike as I see this. This isn't testimony 9 that's properly before the Board because it didn't 10 comply with the rules for submittal. So it seems to me that Mr. Ruiz needs to ask 11 12 for permission for this to come in, and then, at that

13 point, if the Board allows it, we put our opposition --

14 or it would be a Motion to Strike on the record.

15 CO-HEARING OFFICER DODUC: Ah. Okay.

16 So, then, Mr. Burke, let's turn to you. And

17 help me understand the reasoning behind -- I -- and I

18 appreciate that errors are -- occur. I mean, mistakes

19 happen.

20 But help me appreciate why it is so

21 significant that you bring -- you brought this to

22 Mr. Ruiz's attention and submitted the errata so late

23 last night.

24 WITNESS BURKE: Yeah. I apologize for the

25 confusion in the datums that were used in the

California Reporting, LLC - (510) 224-4476

1 comparison of the DSM-II dataset and the actual

2 surveyed data.

3 And if you want me to go into a little

4 background on that, there's -- there's actually two

5 datums that are commonly used in the Delta.

6 One is the USGS datum of 1929.

7 CO-HEARING OFFICER DODUC: Um-hmm.

8 WITNESS BURKE: That's been in place quite a

9 long time.

10 Then, in 1988, the USGS and several other U.S

11 agencies, and Mexico and Canada got together, came up

12 with the NAVD datum in 1988. That's an update to the

14 And the difference between those two datum

15 varies where you are around the country. But in the

16 Delta area, it's generally around a 2.3-foot

17 difference. With the NAVD data of '88, the more

18 late -- the latest datum, it would be higher than the

19 NGVD datum.

20 So I've been working with a lot of the data

21 elevation collection data that DWR's put together for a

22 while. And starting in 2006, all of the DWR data's in

23 NAVD 88 datum. And, also, the latest DSM-II model

24 variations have all had their data in NAVD 88 datum.

25 But the older version of DSM-II that's

California Reporting, LLC - (510) 224-4476 www.CaliforniaReporting.com 1 presently being used in this hearing still uses the old

2 datum NGVD 1929.

3 And I didn't realize that until I was

4 comparing the two models and I noticed that, in the

5 comparison on the DWR website, they said one of the

6 attributes of the later DSM-II models was that it used

7 the NAVD 88 data. That made me start to think does the

8 old model use NGVD datum, then, if they're calling this

9 out as an attribute.

10 That's when I went back yesterday, started

11 looking through the datasets, and realized that the

12 data that I was extracting from the old DSM-II models

13 it used for this hearing, was it truly in the NGVD

14 datum?

15 So I went ahead and looked at what that would

16 do. What that does is, it takes the NGVD

17 cross-sections from the DSM-II model and moves them up

18 2.3 feet.

19 And one of our positions that we're trying to

20 argue in this case was that there was a big difference

21 between the existing geology -- channel geometry and

22 the existing -- and the data that's presently being

23 used in the DSM-II model.

24 By accounting for this 2.3-foot rise, it

25 lessens that difference and actually weakens our case

California Reporting, LLC - (510) 224-4476

1 to some extent because, now, there isn't that great of

2 a difference in some locations between real data within

3 the channels and the data that's being used in the

4 DSM-II model.

5 CO-HEARING OFFICER DODUC: All right.

6 And Miss Morris, let me understand:

7 Your opposition is to the . . . submittal of

8 this testimony outside of our procedures in terms of

9 deadlines and not in terms of the significance of the

10 result itself.

11 MS. MORRIS: I don't think that's true, but

12 I'm willing to explore that on cross-examination,

13 because he makes opinions about that data that he

14 didn't change. So I'm willing to explore that on

15 cross-examination if that's what the Board wants to do.

16 I also have another Motion to Strike this

17 testimony before even the -- the updated testimony on

18 another basis.

19 So I don't want to confuse the two, but I

20 don't -- I don't want it to be noted that there aren't

21 other objections to this testimony.

22 CO-HEARING OFFICER DODUC: Anyone else?

23 Mr. Berliner.

24 MR. BERLINER: Mr. Mizell had to step out for

25 a second, so on behalf of the Department, we support

California Reporting, LLC - (510) 224-4476

1 the motion by the State Water Contractors. 2 CO-HEARING OFFICER DODUC: I don't believe 3 there is a motion yet. 4 MR. BERLINER: The argument behind the motion. CO-HEARING OFFICER DODUC: I don't think there 5 6 is a motion yet. Okay. 7 Miss Des Jardins. 8 MS. DES JARDINS: Just one more brief 9 observation. 10 There is a precedent in the hearing for when 11 an error was discovered -- I believe it was in

12 groundwater modeling testimony -- for the expert to

13 make a simple correction when it was -- which is what

14 this is.

15 CO-HEARING OFFICER DODUC: Anything else to 16 add, Mr. Ruiz, Mr. Burke, before we consider this? 17 MR. RUIZ: Yes. I would just add a couple 18 things. I think Mr. Burke's explanation to you in 19 20 response to your question, I would -- I would submit as 21 an offer of proof behind the relevance and the importance of this. 22 23 Also, you know, this proceeding, as the 24 Hearing Officers have said many times, the goal is to 25 get accurate and useful information so that, when you California Reporting, LLC - (510) 224-4476 www.CaliforniaReporting.com

1 go back to make the difficult decisions on this matter,

2 that you have all of that.

3 It's -- With that in mind, I think that

4 Mr. Burke's situation that's arisen here is consistent

5 with that. And the information is important.

6 It still shows impacts but it doesn't -- it

7 has lessened the impact, but it still does show impacts

8 to someone in our position.

9 So I would move at this time to have the

10 errata testimony admitted or -- admitted at this time

11 so that that is before the Board at least.

12 Additionally, I might offer that if -- if --

13 if there was some need or reason to, you know, move

14 Mr. Burke in the order so that there -- there could be

15 more time to consider this -- or to consider his

16 revised charts, that we could do that. I do have

17 Dr. Michael here ready to go as well.

18 CO-HEARING OFFICER DODUC: Thank you.

19 And I appreciate and agree, Mr. Ruiz, that it

20 is our intent to get accurate information and the data

21 upon which to make our decision.

22 So the fact that Mr. Burke discovered an error

23 in his analysis and brought it to our attention in

24 order to correct the record is an important factor.

25 Miss Morris or Mr. Berliner, what is your

California Reporting, LLC - (510) 224-4476

1 response to Mr. Ruiz's offer to bring Mr. Burke back at

2 a later time so that you would have more time to review

3 his revised testimony?

4 MS. MORRIS: I already stayed up all night and

5 put my whole technical team to staying up all night, so

6 it would be an extreme prejudice for us not to be able

7 to cross Mr. Burke because I am completely unavailable

8 next week.

9 So I would like to proceed. If that's what

10 the -- If that's what the Board -- If the Board lets

11 testimony in, I'm ready to go.

12 CO-HEARING OFFICER DODUC: All right. Then

13 let me do this, since you're at the microphone, and

14 before we take it under consideration, let's hear your

15 Motion to Strike as well.

16 MS. MORRIS: I would start with the -- a

17 Motion to Strike on SDWA-323-Revised Opinions 2 and 3

18 on Page 5; Page 16, Line 28 to Page 28; Page 32, Lines

19 5 to 7, 13 to 15 and 20 to 24; Page 36, Lines 8 to 12.

20 SDWA-323-Revised Errata, .pdf Pages 4 through

21 9. That's also SDWA-324, Slide 2, Opinions 2 and 3;

22 slide 3, second sentence of the second bullet; Slide 5,

23 second bullet; Slide 16 through 24; and Slide 30,

24 Conclusion 4.

25 And then the SDWA-324-Errata, .pdf pages --

California Reporting, LLC - (510) 224-4476

2 I just -- Those -- All those cites have to do 3 with the bathymetry data. And I believe that this is 4 improper rebuttal testimony because the bathymetry data 5 for DSM-II has not changed from Part 1 throughout this 6 proceeding. It's the same bathymetry data. 7 These arguments that are now being raised in 8 Part 2 as rebuttal testimony could have been raised at 9 any point in time. 10 The datum and the referenced datum haven't 11 changed in DSM-II. The bathymetry data from all the 12 different runs is the name. In fact, the bathymetry

1 I'm sorry. I already said that.

13 data doesn't change from the NAA to the H3+ or from the

14 NAA to the BA H3+.

15 So these essentially are new arguments that

16 should have been made in Part 1 as part of Mr. Burke's

17 testimony.

18 I have other Motions to Strike on different

19 portions, but that is the argument for all of the

20 bathymetry information.

21 CO-HEARING OFFICER DODUC: Let me hear from

22 Mr. Ruiz before you move on to other Motions to Strike.

23 MR. RUIZ: I wasn't able to specifically

24 follow the specific citations, so I have to ask her for

25 those because she was going quickly. But I do

California Reporting, LLC - (510) 224-4476 www.CaliforniaReporting.com 1 understand they're all related to the bathymetry so I

2 can address in that regard.

3 The bathymetry, obviously, has to do directly

 $4\,$ with water levels. It has to do with flow. It has to

5 do with salinity even.

6 And in the Part 2 testimony of Miss Smith and,

7 to some degree Mr. Reyes, water levels, salinity, those

8 issues are still -- are compared with the -- both the

9 CWF H3 scenario and indicate that there's very minor or

10 insignificant changes relative to the No-Action

11 Alternative.

12

So, that issue is -- is front and center in

13 Part 2, and we have the right and the ability to try to

14 rebut those positions in Part 2. Just because it

15 wasn't done in Part 1 is similar to some of the issues

16 we discussed yesterday. It's still a live and an

17 important issue in Part 2, and this is when we were

18 able to -- to do our rebuttal analysis.

19 So I think it's -- it's very relevant in

20 response to the Part 2 testimony.

21 CO-HEARING OFFICER DODUC: Let me hear from

22 Mr. Keeling and Miss Meserve, and anyone else in

23 support of Mr. Ruiz's argument before I get back to

24 you, Miss Morris.

25 MR. KEELING: Good morning. Tom Keeling on

California Reporting, LLC - (510) 224-4476

1 behalf of the San Joaquin County Protestants.

2 Apropos of Miss Morris' comments, the relevant

3 question is not whether the data existed. It certainly

4 did, as did so many other documents that we've talked

5 about.

6 The question for proper -- whether this is

7 proper rebuttal is whether this responds to

8 case-in-chief testimony by DWR during Part 2. That's

9 the question, not whether the data existed and somebody

10 could have talked about it.

11 MS. MESERVE: Good morning. Osha Meserve for

12 LAND.

14 certainly include public interest. And the kinds of

15 issues that this Protestant is concerned about are

16 certain, you know, agriculturally effect on water

17 diversions down there, is a public interest and falls

18 within Part 2.

13

19 So we need to be able to talk about those

20 issues in the context of Part 2, as well as in Part 1

21 which, as has been noted, is already past.

22 Thanks.

23 MS. DES JARDINS: I would just like to add

24 that I believe that this is fundamental to rebutting

25 assertions made in the case in chief about modeling of

California Reporting, LLC - (510) 224-4476

1 impacts on water levels and . . . 2 Yeah. That -- That's all. 3 CO-HEARING OFFICER DODUC: Miss Morris. 4 MS. MORRIS: Thank you. 5 So, I would agree with Mr. Keeling, and that 6 was my point, is that in Part 1, water levels, 7 salinity, all of the information that Mr. Burke is 8 rebutting was covered in Part 1 direct testimony. And 9 in Part 2, there was no testimony on water levels or 10 water quality in the case in chief of the Department of 11 Water Resources and the Bureau. Simply, the only 12 difference was 1143.

```
13 And my point was, the modeling, the DSM-II
```

14 modeling, has not changed. So there's no entry for

15 appropriate -- proper rebuttal since the issues --

16 there was no testimony on direct by the Department and

17 the Bureau in Part 2 on water levels or salinity.

18 CO-HEARING OFFICER DODUC: Anything to add,

19 Mr. Berliner?

20 MR. BERLINER: No. We agree with that

21 completely.

22 MS. MORRIS: Thank you.

23 CO-HEARING OFFICER DODUC: Was there another

24 motion, Miss Morris?

25 MS. MORRIS: Of different sections of the

California Reporting, LLC - (510) 224-4476

```
1 testimony, not on bathymetry.
 2
           Do you want all of them?
 3
           CO-HEARING OFFICER DODUC: On Mr. Burke's
 4 testimony?
 5
        MS. MORRIS: Correct.
 б
           CO-HEARING OFFICER DODUC: How many do you
7 have?
 8
           MS. MORRIS: Two simple ones.
        CO-HEARING OFFICER DODUC: All right. Let's
 9
10 get to them.
11
           MS. MORRIS: Okay.
12
            I would -- I would move to strike on SDW --
```

13 SDWA-323-Revised on Page 4, Line 16 to Page 5, 2 as

14 outside the scope of rebuttal because it's dealing with

15 Boundary 1 and Boundary 2, and there are no references

16 to the Supplemental EIR or other Part 2 case-in-chief

17 testimony.

18 Also, there was no discussion on -- on case in

19 chief of boundaries -- of the boundary analysis in the

20 Part 2 case in chief.

21 Also move to strike Page 29, Line 12, first

22 sentence through Line 16; and Page 35 --

23 MR. RUIZ: Stef, Stef, Stef, could you hang on

24 a second?

25 MS. MORRIS: I'm sorry.

California Reporting, LLC - (510) 224-4476

```
1
            MR. RUIZ: Page 29 . . .
 2
            MS. MORRIS: Line 12, first sentence through
 3 Line 16; and Page 35, last two lines, as outside the
 4 scope for the same reasons; as well as SDWA-324,
 5 Slide 6, third bullet. It's the corresponding language
 6 in the PowerPoint.
7
            Are you ready, Mr. Ruiz?
 8
            MR. RUIZ: Okay.
9
            MS. MORRIS: Okay. Sorry.
10
            The next one is to strike --
11
            CO-HEARING OFFICER DODUC: Hold on. I'm
```

12 sorry.

13 Was that one set of motion --

```
14 MS. MORRIS: Yes.
```

15 CO-HEARING OFFICER DODUC: -- to strike?

16 And I -- Mr. Ruiz is probably busy scribbling

17 and will not have a chance to respond yet so go ahead,

18 Miss Morris.

19 MS. MORRIS: And they're all for the same

20 reason, that they're outside -- there was no -- they're

21 not responsive to any case-in-chief Part 2 testimony.

22 On Page 29 of Mr. Burke's testimony, Line 18

23 through Page 30, Line 25; plus all of Exhibit SDWA-325;

24 and SDWA-324, Slide 5, third bullet.

25 And then, finally, I would move to strike

California Reporting, LLC - (510) 224-4476 www.CaliforniaReporting.com

```
1 Page 16, 10 -- Lines 10 to 12, and Page 31, Lines 1 to
 2 6 as it refers to Mr. Pritchard's testimony based on a
 3 new analysis by Mr. Burke.
            Mr. Pritchard is not available for
 4
 5 cross-examination on the findings that Mr. Burke now
 6 makes.
7
            CO-HEARING OFFICER DODUC: I'm sorry. Repeat
 8 that.
 9
            MS. MORRIS: The basis of the motion for the
10 last one --
11
            CO-HEARING OFFICER DODUC: Yes.
```

12 MS. MORRIS: -- is that it -- it cites to

13 previous Pritchard testimony but it's tying it to

14 Mr. Burke's new analysis.

15 And Mr. Pritchard is not available as a

16 witness to cross-examine as to whether or not his

17 testimony would still stand based on Mr. Burke's new

18 conclusions.

19 And I'm happy to provide additional

20 information. And I'll make sure Mr. Ruiz has all the

21 cites.

22 CO-HEARING OFFICER DODUC: Yes. I'm starting

23 to reconsider our direction to only provide objections

24 orally at the hearing.

25 CO-HEARING OFFICER MARCUS: (Inaudible.)

California Reporting, LLC - (510) 224-4476

1 CO-HEARING OFFICER DODUC: Yeah, I know. 2 All right. Let us go ahead and take a break 3 while we consider this. And, Mr. Ruiz, if you have the opportunity to 4 5 consult with Miss Morris and Mr. Burke and have a 6 response to some of those objections, I would 7 appreciate hearing them when we return. 8 MR. RUIZ: Okay. I'll go and do that. 9 CO-HEARING OFFICER DODUC: Thank you. 10 (Recess taken at 9:57 a.m.) 11

-	1 1
	≺
-	

14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
	California Reporting, LLC - (510) 224-4476

1 (Proceedings resumed at 10:24 a.m.:) 2 CO-HEARING OFFICER DODUC: All right. Please 3 take a seat. We're back. 4 Before the break, we heard opposition by the 5 State Water Contractors, supported by the Department of 6 Water Resources, against the introduction of revised 7 testimony by Mr. Burke. 8 We also heard numerous motions, again, by 9 State Water Contractors, supported by Department of 10 Water Resources, on -- to strike various sections of 11 Mr. Burke's testimony on a variety of different bases. 12 We've considered all that. Our ruling is as

14 We are allowing the introduction of the

15 revised testimony by Mr. Burke. However, to allow all

16 parties -- including the Hearing Team for that

17 matter -- the opportunity to review the revised

18 testimony and prepare for cross-examination, as well as

19 to allow us to consider the various motions to strike

20 Mr. Burke's testimony and ensure an efficient

21 proceeding as we continue with the presentation of his

22 testimony and the cross-examination, we are postponing

23 Mr. Burke's presentation until the week of August 27th.

24 In the meantime, we ask that the State Water

25 Contractors and Department of Water Resources to submit

California Reporting, LLC - (510) 224-4476 www.CaliforniaReporting.com 1 in writing the Motions to Strike portions of

2 Mr. Burke's testimony by noon on Monday. And Mr. Ruiz

3 and anyone else may have noon on Tuesday to respond.

4 All right. Mr. Burke, thank you for driving

5 up today, but you're dismissed for now.

6 WITNESS BURKE: Thank you, and sorry for the

7 confusion.

8 CO-HEARING OFFICER DODUC: All right. So,

9 with that, Dr. Michael.

10 MR. BERLINER: Before we proceed.

11 CO-HEARING OFFICER DODUC: Oh, Mr. Berliner.

12 MR. BERLINER: Yes.

- 13 So, we are preparing our response, which is
- 14 due at 5 p.m. today, to prior motions.

15 I'm wondering if you would consider a later

16 due date than noon on Monday to provide the

17 documentation for the motions.

18 CO-HEARING OFFICER DODUC: Noon on Tuesday.

19 MR. BERLINER: Excellent. Thank you.

20 CO-HEARING OFFICER DODUC: Everyone else will

21 have noon on Wednesday to respond; all right?

22 MR. BERLINER: Thank you.

23 CO-HEARING OFFICER DODUC: And as Dr. Michael

24 is setting up, Miss Des Jardins.

25 MS. DES JARDINS: I just have a request.

California Reporting, LLC - (510) 224-4476

1 I have a witness, Dr. Tom Williams, coming up 2 from Southern California. 3 CO-HEARING OFFICER DODUC: I'm sorry. 4 MS. DES JARDINS: Yeah. And it's a long way 5 for him to travel. And so if there's any way, if there are б 7 objections that would result in him being bumped, 8 Motions to Strike, if those could be submitted in 9 advance, or made -- I know they're required to be oral 10 at the hearing. 11 (Pause in proceedings.) 12 CO-HEARING OFFICER DODUC: So this is

13 Dr. Thomas William appearing on the panel of Save Our

14 Sandhill Cranes, CSPA and DDJ.

15 MS. DES JARDINS: Yeah. Yes. And it's

16 also --

17 CO-HEARING OFFICER DODUC: Right now, that

18 group is last in the order of direct testimony.

19 MS. DES JARDINS: The other issue, too, is

20 that if there are Motions to Strike. I did look up --

21 there was an assertion made about what was not in the

22 case-in-chief testimony -- and found it was wrong, but

23 it required time to do a search on the submitted

24 testimony.

25 So, other things have occurred to some of his

California Reporting, LLC - (510) 224-4476 www.CaliforniaReporting.com 1 case in chief where there's a Motion to Strike, to have

2 enough time to respond to such assertion.

3 CO-HEARING OFFICER DODUC: Miss Des Jardins, 4 we will not get to that panel, at least not next week. 5 So, given the flurry of oral objections -- and 6 I think we've experienced the challenges of dealing 7 with -- with -- with those oral objections -- let us 8 consider both your request as well as our process and 9 issue some revised guidelines next week with respect to 10 objections to testimonies and witnesses' appearances. 11 MS. DES JARDINS: Thank you very much.

12 CO-HEARING OFFICER DODUC: All right. And

13 before we get to Dr. Michael, let me double-check.

The cross-examination that I have is joint 14 15 DWR-State Water Contractors for 30 minutes; Group 4 16 San Luis/Delta-Mendota for 10; CSPA for 15; 17 Miss Des Jardins for 15; Miss Meserve on behalf of 18 Group 47 for 25. Any changes or additions to that? 19 20 MR. WALTER: Yes. Good morning. Hanspeter 21 Walter, San --CO-HEARING OFFICER DODUC: Your microphone is 22 23 not on. 24 MR. WALTER: Good morning. Hanspeter Walter, 25 San Luis and Delta-Mendota Water Authority. We have no California Reporting, LLC - (510) 224-4476

1 cross-examination for Mr. Burke. CO-HEARING OFFICER DODUC: All right. I will 2 3 now turn it over to Mr. Ruiz. 4 MR. RUIZ: Good morning again. Dean Ruiz for 5 the South Delta Water Agency parties. This morning, we're presenting Dr. Jeffrey б 7 Michael as part of our Part 2 rebuttal case. And I'm 8 also here with Mr. Keeling and Mr. Ferguson on behalf 9 of the County of San Joaquin and Sacramento 10 respectively. 11

12 Jeffrey Michael,

13	called as a witness by Protestants South
14	Delta Water Agency, et al., County of San
15	Joaquin, and County of Sacramento, et
16	al., having previously been duly sworn,
17	was examined and testified further as
18	follows:
19	DIRECT EXAMINATION BY
20	MR. RUIZ: Dr. Michael, is SW
21	SDWA-321-Revised a true and correct copy of your
22	written testimony?
23	WITNESS MICHAEL: Yes, it is.
24	MR. RUIZ: And is SWDA-322 a true and correct
25	copy of your PowerPoint presentation?
	California Reporting, LLC - (510) 224-4476
	www.CaliforniaReporting.com

1 WITNESS MICHAEL: Yes, it is. 2 MR. RUIZ: And can you please summarize your 3 testimony at this point. 4 WITNESS MICHAEL: Okay. 5 MR. RUIZ: Actually, if you'd give me just one 6 second, please. 7 Before we start, Mr. Ferguson has one issue 8 that he wants to address with regard to Dr. Michael's 9 testimony. 10 MR. FERGUSON: Yes. Thank you. 11 Good morning. Aaron Ferguson, County of

12 Sacramento.

```
One issue is an error, and then the second
13
14 issue's going to be a motion for reconsideration.
15
            In a ruling on July 27th, you struck a por --
16 the Hearing Team struck a portion of Dr. Michael's
17 testimony. And in that ruling, it indicated that
18 Page 4, Lines 11 through 20 were to be stricken.
            In SDWA-321-Revised, more testimony than that
19
20 was stricken. And, in fact, the struck -- stricken
21 portion starts at Page 4, Line 11 through Page 5,
22 Line 19.
23
            So, at a minimum, we want SDWA-321-Revised
24 corrected to reflect what the ruling states. So, at a
25 minimum, subject to what I'm going to request here in a
              California Reporting, LLC - (510) 224-4476
```

1 minute, the stricken portion should be Page 4, Lines 11

2 through 20.

3 CO-HEARING OFFICER DODUC: Hold on,

4 Mr. Ferguson. I'm just now pulling up --

5 MR. FERGUSON: Okay.

6 CO-HEARING OFFICER DODUC: -- Revised 321.

7 So please repeat for me.

8 MR. FERGUSON: So, the Revised 321 has

9 stricken Page 4, Line 11 through Page 5, Line 19.

10 CO-HEARING OFFICER DODUC: And?

11 MR. FERGUSON: And your ruling on July 27,

12 2018, on Page 2 indicates that the only portion that

14 20.

15 (Pause in proceedings.)

16 CO-HEARING OFFICER DODUC: Mr. Ferguson, I am

17 reading the portion of the testimony that was struck,

18 and I believe the same reasoning applies even though it

19 was not mentioned in the ruling letter, that that

20 testimony refers to EIR/EIS and the adequacy of the

21 EIR/EIS.

22 And, for that reason, those portions remain

23 stricken.

24 WITNESS MICHAEL: (Shaking head.)

25 MR. FERGUSON: Well, Dr. -- Dr. Michael was

California Reporting, LLC - (510) 224-4476

1 simply responding to Miss Buchholz's statement that she

2 relied in her case-in-chief testimony on the EIR

3 chapters for her opinions about the economics of the

4 California WaterFix.

5 So Dr. Michael wasn't arguing issues of

6 credibility or anything like that, which is used as an

7 example in your ruling.

8 He was simply referring to what does not exist

9 in the EIR, in his opinion, because Miss Buchholz cited

10 that as the basis for her opinion.

11 So, he was providing his opinion on her

12 analysis of what's in the EIR and her basis for her

14 CO-HEARING OFFICER DODUC: Anything to add,

15 Mr. -- Dr. Michael?

16 WITNESS MICHAEL: Yeah. There's actually

17 nothing wrong with the EIR/EIS. I'm not commenting the

18 accuracy.

19 I'm commenting on the fact that she made

20 assertions and she cited to the EIR to support the

21 assertions. What I'm saying is, the EIR does not

22 support her statements.

23 CO-HEARING OFFICER DODUC: Ah. Understood.

24 Any questions, Mr. Deeringer?

25 MR. DEERINGER: Just a clarification for

California Reporting, LLC - (510) 224-4476

2 The example and examples that were provided in
3 the ruling letter were not an exhaustive list of the
4 basis upon which testimony can be stricken.
5 It was meant as an example of a party
6 providing non-expert interpretation of evidence already

1 Mr. Ferguson and anybody else.

7 in the record, or observation about what is and is not

8 in the record, that an attorney could just as easily

9 make in a closing brief.

10 CO-HEARING OFFICER DODUC: Oh. That was a

11 different basis for striking it.

12 MR. DEERINGER: Yes, I think so.

14 basis was not that it was a description of EIR/EIS but

15 that it was argumentative.

16 MR. DEERINGER: Yes, that's correct.

17 It was -- My recollection -- and this is

18 reaching back in the Wayback Machine for me -- is that

19 this was testimony that was stricken because it was

20 making -- Although Dr. Michael is an expert, these were

21 observations that did not draw on his expertise to the

22 extent that they were merely observing what was and

23 what was not in the EIR/EIS.

24 WITNESS MICHAEL: (Shaking head.) No.

25 MR. DEERINGER: That was -- I'm just

California Reporting, LLC - (510) 224-4476

www.CaliforniaReporting.com

1 clarifying that was the original basis for striking his

2 testimony.

3 To the extent that either of you want to

4 provide additional clarification at this time to

5 support the Hearing Officers' reconsideration, I think

6 that would probably be appropriate right now.

7 MR. FERGUSON: All I can say is, it's

8 perfectly responsive to her -- her testimony and -- and

9 her comments about the bases for her opinion.

10 And Dr. Michael is commenting on what is and

11 is not in the EIR with respect to economic issues in

12 order to . . . counter her opinions about economics of

13 the Project.

MR. RUIZ: And I would just add that I 14 15 understand what you said, Mr. Deeringer, but just 16 because it might be something that would also be 17 mentioned in a closing brief, if it so obviously begs 18 for a response by the expert, it would almost be an 19 error on his part or below his responsibility to 20 respond when it calls for it. 21 It's -- It's -- It's just such an obvious 22 statement to which he responds. 23 WITNESS MICHAEL: Just one --24 CO-HEARING OFFICER DODUC: Dr. Michael. 25 WITNESS MICHAEL: -- comment. California Reporting, LLC - (510) 224-4476

1 The -- The lines that the ruling struck, I 2 read that ruling. I understand that that was argument. 3 There were some things that were talked about how you 4 had panels on modeling but you didn't have panels on 5 economics. б That's -- I interpreted the few statements 7 there were argument, and so I understood the basis for 8 striking that. The citation to EIR/EIS, rather just state in 9 10 my professional opinion her statement is unsupported, I 11 cited directly to the text of the EIR/EIS because I 12 thought that would be -- carry more -- carry more

13 weight than just expressing my opinion.

CO-HEARING OFFICER DODUC: All right. Any --14 15 Any input from Petitioners in this matter? 16 All right. In that case, we are granting 17 Mr. Ferguson's Request for Reconsideration, and we are 18 allowing back those sections in Dr. Michael's 19 testimony. 20 MR. RUIZ: Would you like us to proceed now? 21 CO-HEARING OFFICER DODUC: Unless there's 22 something else. 23 MR. FERGUSON: Well, there was one -- I'm 24 going to push my luck maybe. 25 But there was one additional request that I California Reporting, LLC - (510) 224-4476

1 was going to make. You resolved the issue with Lines,

2 I believe, 21, Page 4, through Line 19, Page 5.

3 We were also going to request that the last

4 sentence of the paragraph that is on Page 4, Lines 11

5 through 20, also not be stricken because it -- it is

6 not argumentative.

7 It is simply identifying Ms. Buchholz's

8 statement that serves as the jumping-off point, if you

9 will, for the remainder of Dr. Michael's analysis in

10 that section.

11 And while it mentions something about

12 Mrs. Buchholz's credentials, it wasn't intended to be

13 an attack on her credibility or anything --

14 CO-HEARING OFFICER DODUC: I agree.

15 MR. FERGUSON: -- like that, so . . .

16 CO-HEARING OFFICER DODUC: I agree.

17 MR. FERGUSON: If we could add back in that

18 sentence --

19 CO-HEARING OFFICER DODUC: Agreed.

20 MR. FERGUSON: -- I'd appreciate it.

21 Thank you.

22 MS. MESERVE: And that was what I was going to

23 point out. It would make more sense to have that in.

24 CO-HEARING OFFICER DODUC: Yes, which is why I

25 immediately agreed.

California Reporting, LLC - (510) 224-4476

1 MR. FERGUSON: All right. Thank you very 2 much. 3 CO-HEARING OFFICER DODUC: Now let's proceed. MR. RUIZ: All right. Dr. Michael, at this 4 5 point, can you please summarize your Part 2 testimony, 6 rebuttal testimony. 7 WITNESS MICHAEL: Sure. 8 I have a -- a PowerPoint which will be useful 9 for a few graphics that are in it. 10 I apologize if it has too many words in the 11 PowerPoint, so . . .

12 (Exhibit displayed on screen.)

14 slide. 15 So next slide, please. (Exhibit displayed on screen.) 16 17 WITNESS MICHAEL: So, to get started at the 18 bottom about Dr. Shires' testimony. Dr. Shires exaggerated the economic and social 19 20 contribution of Westlands Water District agriculture. 21 But in the interest of time, I'm not going to cover 22 this in oral cerem -- in oral summary. 23 Instead, my mark -- remarks are going to focus 24 on these three aspects of Miss Buchholz's testimony and 25 will conclude with some suggested actions or conditions California Reporting, LLC - (510) 224-4476

1 for the Board.

2 So the first point is actually what we were 3 just discussing, that some claims about economic public 4 interest are not supported by the EIR/EIS. The second point is a bit more involved. It's 5 6 that the -- her high/low Project Description is 7 incredible in light of recent financial developments. 8 Petitioners have omitted key operating 9 criteria from the Project Description in financial 10 decision-making proceedings which they have modeled. 11 The way they modeled it, is putting WaterFix-operating

12 criteria into an alternative no-Project baseline.

14 greatly compounded by recent changes to the Project

15 finance.

16 And those changes are: In recent months, the

17 CVP has decided not to fund their 45 percent share of

18 the Project, so two actions have been taken in

19 response.

20 First, the State Water Project has increased

21 its share from 55 percent to 67 percent of the Project.

22 And, second, Metropolitan Water District

23 agreed to finance an additional 33 percent outside the

24 State Water Project in order to facilitate the

25 construction of the second tunnel.

California Reporting, LLC - (510) 224-4476 www.CaliforniaReporting.com

1 This has prevented changes to the physical 2 facilities, so we have a two-tunnel project in front of 3 us now. But there have been promised water supply 4 benefits for this additional investment that will 5 change operations, water supply, and other impacts from 6 what is described in the Petition. 7 My third point is: Flows from the second that 8 Miss Buchholz claims that are benefits to agriculture 9 are inaccurate especially in light of these financial 10 developments. 11 So the next slide, please.

12 (Exhibit displayed on screen.)

14 quickly. But in her testimony, given the exchange we

15 just had, Miss Buchholz states (reading):

16 ". . . Implementation of CWF H3+ will

17 improve . . . the economics of the State

18 of California."

19 In her testimony and upon cross-examination,

20 she only cited the socioeconomic chapter of the EIR/EIS

21 to support these statements.

22 Now, as an economist, I can explain to you why

23 the EIR/EIS is insufficient but that's not necessary

24 because of these quotes from the EIR/EIS itself that I

25 included in the testimony.

California Reporting, LLC - (510) 224-4476

www.CaliforniaReporting.com

1	So next slide.
2	(Exhibit displayed on screen.)
3	WITNESS MICHAEL: The EIR describes economic
4	assessments that should be conducted and are not part
5	of the EIR/EIS normally. These are analyses that
6	determine whether the Project is feasible and in the
7	public interest, not the socioeconomic analysis in the
8	EIR.
9	And, in fact, the EIR received comments from
10	me and others about these financial issues. And the
11	way they respond to the comments also reinforces the
12	point by stating that these comments address the merits

```
14
            Thus, Miss Buchholz grossly misrepresented the
15 EIR by claiming it supported her statements about
16 economic public interest.
17
            Next slide.
            (Exhibit displayed on screen.)
18
            WITNESS MICHAEL: Miss Buchholz provided a
19
20 high-level Project Description that included three
21 elements: Facilities, Environmental Commitments, and
22 Operating Criteria.
23
            Specifically, her description of the operating
24 criteria lacks credibility. There is no evidence of
25 the financial feasibility of this operating criteria,
```

13 of the Project, which is not part of the EIR analysis.

California Reporting, LLC - (510) 224-4476 www.CaliforniaReporting.com

1 and Petitioners are using a different description of 2 operations in the financial decision-making venues. 3 The inconsistent Project Description in 4 environmental, water rights and financial 5 decision-making arenas does not support the public 6 interest. 7 Next slide. 8 (Exhibit displayed on screen.) WITNESS MICHAEL: The EIR is clear that 9 10 operating criteria for the South Delta only applied to 11 WaterFix. So I highlight the second bullet point, a 12 quote from the EIR that says, as an example of that

```
13 (reading):
```

```
14
                  "These newly proposed OMR
            criteria . . . are in response to
15
16
             expected changes under the Proposed
17
            Action, and only applicable after the
18
             proposed North Delta diversion becomes
             operational."
19
            Next slide, please.
20
21
             (Exhibit displayed on screen.)
22
             WITNESS MICHAEL: There are numerous instances
23 of Metropolitan Water District and Department of Water
24 Resources in the economic analysis and their staff
25 test -- staff presentations, assuming that they're
               California Reporting, LLC - (510) 224-4476
                       www.CaliforniaReporting.com
```

1 identical South Delta operating criteria with and

```
2 without the Project.
```

3 They -- They said that operating criteria are

4 likely to be the same with and without the Project,

5 often referring to adaptive management.

6 So this slide lists to examples of that. And

7 the most obvious one comes from the most recent

8 economic analysis prepared by DWR that compares

9 WaterFix to, quote, "existing conveyance with WaterFix

10 operating criteria," end quote.

11 The quote at the bottom of the slide comes

12 from Metropolitan Water District's senior staff

13 presentation to Board Members prior to their vote to

14 increase their funding to in excess of \$10 million for

15 the project.

16 In this, they state that operating regulations

17 will be the same with and without the Project, and,

18 thus, the Project has "1.3 million acre-feet of

19 incremental water supply . . ."

20 That's 6.5 times the incremental water supply

21 in the EIR and in this petition.

22 Next slide, please.

23 (Exhibit displayed on screen.)

24 WITNESS MICHAEL: This slide and the next

25 three are the -- You can see the slide -- in the slide

California Reporting, LLC - (510) 224-4476

1 that's clipped directly from the Met staff

2 presentation -- Which is also Exhibit SDWA-315 for the

3 full presentation.

4 So this is a presentation made to the

5 Metropolitan Board prior to their vote for additional

6 funding. And it illustrates the derivation of the

7 1.3 million acre-feet of Project yield with the

8 alternative Project description.

9 So the middle bar shows average water

10 deliveries from imposing WaterFix operating criteria H3

11 to H4 on the existing system.

12 The right bar shows WaterFix H3 to H4, which

13 you're familiar with in this hearing.

```
And you see, in the box, it derived that the
14
15 incremental water supply is 1.3 million acre-feet by
16 comparing the middle bar to the bar on the right.
17
            And this number's critical because, as I show
18 in the next slides, Metropolitan staff and Department
19 of Water Resources are using this figure to define the
20 water supply benefits that will be received by the
21 State Water Project and Metropolitan Water District in
22 return for paying the CVP's 45 percent cost share.
23
            Next slide, please.
24
             (Exhibit displayed on screen.)
             WITNESS MICHAEL: So this slide looks at the
25
               California Reporting, LLC - (510) 224-4476
                       www.CaliforniaReporting.com
```

1 first step, the move from a 55 percent share to a

2 67 percent share.

3 So this slide -- In this slide, the

4 Metropolitan Water District staff shows their Board the

5 water supply benefit from increasing their share from

6 55 to 67 percent.

7 Looking at the second and the third rows,

8 you'll see that the change decreases the water supply

9 benefits to the CVP by 156,000 acre-feet. So you can

10 see on the CVP row, it goes from 585 to 5429, whereas

11 on the State Water Project row, the water supply

12 increases by the same amount.

```
Metropolitan Water District staff said this --
14 this was the water supply return on investment for
15 increasing the State Water Project cost share by about
16 $2 billion.
17
            Next slide, please.
            (Exhibit displayed on screen.)
18
            WITNESS MICHAEL: The second change in the --
19
20 the financing was Metropolitan Water District agreeing
21 to finance what has been described as the 33 percent
22 unsubscribed capacity. And this is the agreement that
23 facilitated the -- the second tunnel construction.
            In this slide, Metropolitan staff describes
24
25 the benefits to Metropolitan Water District of an
              California Reporting, LLC - (510) 224-4476
```

13

1 estimated \$6 billion investment in this unsubscribed

2 capacity.

In that presentation, Metropolitan staff said
the 33 capa -- 33 percent capacity will be, quote,
"ours to manage and make decisions on," quote, defined
by a Master Agreement that is under negotiation with
the Department of Water Resources.

8 Next slide.

9 (Exhibit displayed on screen.)

10 WITNESS MICHAEL: To my knowledge, neither

11 Metropolitan or DWR has released a draft of the Master

12 Agreement, so all we have to rely on for what might be

13 in this agreement is what Metropolitan staff, how they

14 describe it.

15 So there's just a few notable elements in

16 their description to their Board of what will be in

17 this agreement.

18 One is that they hope the CVP will lease back

19 that 33 percent ultimately but they provide no

20 compelling evidence for why that would be the case.

21 Second is to note that the water supply

22 benefits of this capacity are calculated using their

23 Project Description, the 1.3 million acre-feet, not the

24 Project Description in this proceeding.

25 Their comments also omitted some nega --

California Reporting, LLC - (510) 224-4476

1 negative impacts on Exchange Contractors and Wildlife

2 Refuges that could occur from this arrangement.

3 And right before I finalized this testimony

4 for the July 10th Board Meeting Staff Report,

5 Metropolitan staff estimated that, if CVP did not lease

6 back the supply, that Metropolitan would only receive

7 150,000 acre-feet of average water supply from this

8 capacity, which is about one-third what they estimate

9 the CVP could gain from the same capacity.

10 So this difference implies that this change in

11 finance will significantly change the way the Project

12 is operated, presumably by . . .

13 Well, I'm not an operations person, but it

14 implies a significant change in the impacts that have

15 not been presented to the Board.

16 Next slide, please.

17 (Exhibit displayed on screen.)

18 WITNESS MICHAEL: So, this table I compiled

19 using the information in the Metropolitan Staff Board

20 by basically using their no-Project baseline and then

21 adding back to it the -- the distribution of that

22 1.3 million acre-feet as they describe it. So, this --

23 and puts it in a format that compares them to the

24 No-Action Alternative, not the alternative which is a

25 standard for comparison in this hearing.

California Reporting, LLC - (510) 224-4476 www.CaliforniaReporting.com

1 So if you compare the top row to the second 2 row -- and the second row is assuming that CVP ends up 3 ultimately leasing back all that capacity -- we see 4 that the CVP water supply is lower than the No-Action 5 Alternative even if they spend billions to get that 6 capacity back for Metropolitan. 7 The bottom row shows what I believe is the 8 most likely case, and that's where CVP does not lease 9 back this capacity. 10 And according to MWD's staff's description of 11 this forthcoming Master Agreement, CVP water supply

12 under WaterFix then would be 450,000 acre-feet lower

13 than the No-Action Alternative, and the State Water

14 Project/MWD water supply would increase by a similar

15 amount.

16 In short, WaterFix does not appreciably

17 increase the water supply at all relative to the

18 No-Action Alternative under this Financial Plan, but it

19 redistributes 450,000 acre-feet from the primarily

20 agriculture-serving CVP to the primarily urban-serving

21 State Water Project.

22 And that doesn't include likely ag-to-urban

23 transfers to water on the State Water Project side.

24 That would be in addition to this.

25 So, in short, the Metropolitan Water District

California Reporting, LLC - (510) 224-4476 www.CaliforniaReporting.com

1 finance WaterFix is a water supply disaster for 2 California agriculture. It does not increase water 3 supply reliability for agriculture as Miss Buckholz's 4 testimony claims. 5 According to Metropolitan Water District staff 6 analysis, it does not even increase the State-wide 7 water supply. 8 Next slide, please. (Exhibit displayed on screen.) 9 10 WITNESS MICHAEL: So, I took two -- two more

11 slides -- two summary points on this slide, and I'll

12 get to the recommendations.

14 provided no valid support for her economic Public

15 Interest Statements.

16 And, second, to summarize that the Project

17 Description is not credible. It's inconsistent with

18 the project described for financial decision-making.

19 And we've seen significant changes in the Project due

20 to financial matters over the past few months. We

21 should expect to see more in the future.

22 The final slide talks about that the Board

23 could take actions to clear up some of this confusion

24 and advance the public interest.

25 First, the Board could require Petitioners to

California Reporting, LLC - (510) 224-4476 www.CaliforniaReporting.com 1 provide the so-called Master Agreement and any other

2 documents that actually explain how the 3,000 cfs

3 unsubscribed capacity will be operated now that it's

4 financed by Metropolitan Water District.

5 Second, the Board could require a financial

6 feasibility analysis of the Proposed Project to ensure

7 that the Project Description is stable and credible and

8 won't be changed over time due to financial

9 considerations.

10 And third would be a move to require

11 consistency in environmental and financial analysis.

12 And that would be by requiring all the public interest

```
13 effects of comparing the Proposed Project to the
```

14 Petitioners' alternative baseline, this existing

15 conveyance with WaterFix operating criteria.

16 That concludes my summary. Thank you.

17 CO-HEARING OFFICER DODUC: Thank you,

18 Dr. Michael.

19 I'll ask the Department of Water Resources to

20 come up and conduct their cross-examination.

21 I don't see Mr. Jackson here. Does anyone

22 know whether CSPA is still planning to conduct cross?

23 MS. MESERVE: We could pass a note.

24 CO-HEARING OFFICER DODUC: All right. Perhaps

25 someone should let Mr. Jackson know.

California Reporting, LLC - (510) 224-4476

1 Otherwise, what I would like to do, if 2 Mr. Jackson is not going to be conducting cross, is go 3 ahead and let the Department -- You're still estimating 4 about 30 minutes, Mr. Berliner? 5 MR. BERLINER: Approximately, yes. CO-HEARING OFFICER DODUC: Okay. And then б 7 Miss Des Jardins with 13, and then Miss Meserve for 25. Are those still good estimates? I'm seeing 8 9 nods. 10 And then -- Well, depending on whether or not 11 there's any redirect. We'll try to get through with

12 Dr. Michael before we take our lunch break.

```
13 MR. BERLINER: And before I start, are we
```

14 going to want to take a break for the court reporter?

15 CO-HEARING OFFICER DODUC: She already got a

16 break today but . . .

17 MR. BERLINER: I was kind of thinking the same

18 thing but I didn't want to --

19 CO-HEARING OFFICER DODUC: It's up to you,

20 Candace.

21 THE REPORTER: I don't need a break.

22 CO-HEARING OFFICER DODUC: Because we're

23 talking only about, I believe, a little over an hour

24 unless Mr. Jackson shows up. If Mr. Jackson does, then

25 we'll take a break.

California Reporting, LLC - (510) 224-4476

1 MR. BERLINER: Good morning. My name's Tom 2 Berliner. I'm an attorney for the Department of Water 3 Resources. 4 CROSS-EXAMINATION BY 5 MR. BERLINER: Good morning, Dr. Michael. б WITNESS MICHAEL: Good morning. 7 MR. BERLINER: Dr. Michael, when you used the 8 phrase "Project Description," were you using that term 9 in the same way as it's used under CEQA? 10 (Pause in proceedings.) 11 MR. RUIZ: I'm just going to object that it's 12 outside of his expertise and calls for a legal

13 conclusion.

WITNESS MICHAEL: I don't know the definition 14 15 under CEQA. I'm having a little . . . 16 MR. BERLINER: I'm not asking you for that. 17 Let me rephrase the question: When you say "Project Description," what do 18 19 you mean? 20 WITNESS MICHAEL: What I mean is . . . I 21 guess, in Miss Buckholz's testimony, she called it a 22 Project Summary. It's been called Project Components 23 in Metropolitan Water District white paper, so I'm 24 calling it a Project Description. I wasn't thinking of 25 any legal term.

> California Reporting, LLC - (510) 224-4476 www.CaliforniaReporting.com

1 MR. BERLINER: That's helpful. Thank you. 2 And just for -- for my clarification: The 3 Project that you are looking at is the CWF H3+ Project; 4 correct? 5 WITNESS MICHAEL: Correct. That's what 6 Miss Buchholz summarized. 7 MR. BERLINER: What physical changes are 8 occurring in the Project as a result of the alleged 9 change in financing? WITNESS MICHAEL: None, in my -- I just -- I 10 11 didn't say that there was a physical change to the 12 facilities. I said that there are change to operations

13 and the impacts of those operations.

14 MR. BERLINER: I'm sorry. I didn't quite

15 catch the last few words there after "and."

16 WITNESS MICHAEL: The impact of operations,

17 such as water supply impacts.

18 MR. BERLINER: To your knowledge, is the -- I

19 want to explore that.

20 To your knowledge, is the operation of the

21 Project --

22 And by "Project," I'm referring now to the

23 CWF H3+. You understand that --

24 WITNESS MICHAEL: Yes.

25 MR. BERLINER: -- if I use the word "Project"?

California Reporting, LLC - (510) 224-4476

1 Okay.

2 To your knowledge, has the proposed operation 3 of the Project changed as a result of the change in 4 financing? 5 WITNESS MICHAEL: What my testimony states is 6 that the operation of the -- in these financial 7 decision-making venues, which are critically important 8 to the public interest, that the operation of the 9 Project is described differently. 10 In general, the description is that the 11 operating criteria with and without the Project is the 12 same.

```
Now, the modeling that they've done for
13
14 those -- for those financial and economic documents is
15 operationalize that assumption by assuming that the
16 WaterFix Operating Criteria, H3, H4 -- I don't know if
17 they've done H3+ -- are applied to the existing system.
            MR. BERLINER: So, are you aware that, for
18
19 purposes of this proceeding, the description is based
20 on the CWF H3+ initial operating criteria and the
21 physical Project Description under Alternative 4A?
            WITNESS MICHAEL: Could you restate that
22
23 question?
24
            MR. BERLINER: Sure.
25
            Are you aware that what's in front of this
              California Reporting, LLC - (510) 224-4476
```

1 Board for consideration -- I don't care what Met says.

But under this Board proceeding, what's up for consideration is Alternative 4A, which is a physical

4 layout of the Project, with initial operating criteria

5 of H3+.

6 WITNESS MICHAEL: My understanding is that one

7 of the key considerations of this hearing are the

8 public interest impacts of building that physical

9 facility.

10 The public interest impacts of that will

11 depend on a lot of things, not just the operation --

12 MR. BERLINER: Dr. Michael, you're not

13 responding to my question. Sorry to in -- to interrupt

14 you.

15 But I asked you what I think is a pretty

16 straightforward question, which is:

17 There's a physical layout for this Project

18 that's in front of the Board. There's Operational

19 Criteria for this Project that are in front of the

20 Board.

21 And on that basis, there's a request to issue

22 a permit having nothing to do what Met is talking about

23 in its Board meetings and its Board.

24 So, I'm just asking you if you understand

25 what's in front of this Board for consideration.

California Reporting, LLC - (510) 224-4476 www.CaliforniaReporting.com

```
1
            WITNESS MICHAEL: I believe I do.
 2
            My understanding is that the public interest
 3 impact of constructing this Project is under
 4 consideration. I do not believe you mentioned that in
 5 your statement.
 б
            Your statement seemed to say -- seemed to
7 really limit what was in front of the consideration of
 8 the -- of the Board in -- in a way that does not
9 conform with my understanding.
10
            MR. BERLINER: Okay. Well, then, maybe
11 this -- Maybe I can -- This may take a little longer
```

12 than expected.

13

14 Are you familiar with water rights petitions 15 that are submitted to the State Water Board? 16 (Pause in proceedings.) 17 WITNESS MICHAEL: Um . . . 18 MR. BERLINER: Do you --MR. KEELING: Objection: Vague and ambiguous. 19 20 Which Petition --21 CO-HEARING OFFICER DODUC: How familiar are --22 I mean, Mr. Keeling, water right petitions are water 23 right petitions. MR. KEELING: But his testimony is not about 24 25 water rights petitions. His testimony is about California Reporting, LLC - (510) 224-4476

1 representations made by major --2 CO-HEARING OFFICER DODUC: I --MR. KEELING: -- players that are inconsistent 3 4 with the economic impact of this Project. He's not an operations expert. He's not a 5 6 physical project expert. He doesn't purport to be. 7 CO-HEARING OFFICER DODUC: I understand that, 8 Mr. Keeling. 9 I believe what Mr. Berliner is driving at is 10 Dr. Michael's understanding of the Project that is 11 before us for consideration and whether that is 12 consistent with his analysis of the Project in his

```
13 rebuttal testimony.
```

```
14 Did I understand that --
```

15 WITNESS MICHAEL: Yes.

16 CO-HEARING OFFICER DODUC: -- appropriately?

17 Okay.

18 WITNESS MICHAEL: Yes.

19 CO-HEARING OFFICER DODUC: So overruled,

20 Mr. Keeling.

21 As I understood that question about Water

22 Right Permits to simply be a foundational question.

23 WITNESS MICHAEL: I understand that we're --

24 that's the proceeding we're in here today, yes.

25 Thank you.

California Reporting, LLC - (510) 224-4476

1 MR. BERLINER: When an applicant comes to the 2 Board and submits a Water Right Petition, they provide 3 a description: What is it that I want from the Board? 4 Do I want to build something? Do I want to use water 5 in Point B instead of Point A? What is it that I want? б The Petition here, without going into any 7 detail, is to build a new facility that will change the 8 point of diversion. Do you understand that? 9 10 WITNESS MICHAEL: I understand that that's the 11 first element in the Project Summary.

MR. BERLINER: Okay. When the Board gets a

12

```
14 those is the public interest.
15
            Do you understand that?
16
            WITNESS MICHAEL: Yes.
17
            MR. BERLINER: So, among the topics that we're
18 discussing here are, impacts on water right holders,
19 impacts on fish and wildlife, in considerations about
20 public interest, and there's a whole bundle of things
21 that goes into all of that.
22
            Do you understand that?
23
            WITNESS MICHAEL: I understand those are
24 among -- among the issues.
            MR. BERLINER: Okay. Presumably, when a
25
              California Reporting, LLC - (510) 224-4476
```

13 Petition, it has to analyze a number of things. One of

1 Petitioner comes to the Board with a Water Rights

2 Petition, they believe it's in the public interest, and

3 it's a question, then, before the Board.

4 And you, as I understand it, are testifying

5 about the economic aspect of the public interest;

6 correct?

7 MR. RUIZ: I'm just going to object as vague

8 and ambiguous; and compound.

9 CO-HEARING OFFICER DODUC: And somewhat

10 argumentative.

11 MR. FERGUSON: Yeah, I would agree. I -- I

12 think there's quite a bit of testimony --

13 MR. BERLINER: I'll --

14 MR. FERGUSON: -- preceding --

15 MR. BERLINER: I'll withdraw the question.

16 MR. FERGUSON: -- the question.

17 I would appreciate getting to the question a

18 little more directly.

19 CO-HEARING OFFICER DODUC: Please --

20 MR. BERLINER: I just withdrew the question.

21 CO-HEARING OFFICER DODUC: Enough. Enough.

22 All right. Mr. Berliner, next.

23 MR. BERLINER: I get they don't like my

24 questions. I will -- I will ask it differently.

25 Your testimony here today is to provide to the

California Reporting, LLC - (510) 224-4476

1 Board with information about the economic issues

2 surrounding this Project; correct?

3 WITNESS MICHAEL: There are -- There's two

4 elements. One is the -- the -- the economic public

5 interest, and the second is the feasibility of the

6 Project.

7 MR. BERLINER: Okay. And in considering the

8 economic interest of this Project, does your analysis

9 take into account the economic interests of the service

10 area of the Metropolitan Water District of Southern

11 California?

12 WITNESS MICHAEL: Yes, it does.

```
13
            MR. BERLINER: Does it take into account the
14 reliability of supply in dry years?
15
            MR. RUIZ: I'm going to object to that as
16 vague and ambiguous.
17
            CO-HEARING OFFICER DODUC: Mr. Berliner.
18
            MR. BERLINER: I think it's a pretty
   straightforward question as to whether his -- he
19
20 considered the reliability of water supply during dry
21 times --
22
            CO-HEARING OFFICER DODUC: Water supply --
23
            MR. BERLINER: -- which is part of the
24 economic interest.
25
            CO-HEARING OFFICER DODUC: Water supply to
              California Reporting, LLC - (510) 224-4476
```

2 MR. BERLINER: Southern California. 3 (Pause in proceedings.) 4 WITNESS MICHAEL: That's not explicitly cited 5 or considered in the testimony I provided today. б MR. BERLINER: Did you consider the dry-year 7 water supply of South-of-Delta agriculture within the 8 State Water Project? WITNESS MICHAEL: So, I don't want to be out 9 10 of turn here, but the things that you're talking about 11 are actually things that I did consider in my 12 case-in-chief testimony.

14 rebuttal testimony, but dry-year issues are mentioned

15 in my case-in-chief testimony.

16 MR. BERLINER: And my question to you is:

17 In making your argument here today about the

18 lack of value to South-of-Delta agriculture, did you

19 consider the agricultural interests within the State

20 Water Project?

13

21 MR. RUIZ: I'm going to object that it

22 misstates his testimony and misrepresents his

23 testimony; and it's also vague and ambiguous in terms

24 of value. When to whom? Under what conditions?

25 CO-HEARING OFFICER DODUC: Mr. Berliner.

California Reporting, LLC - (510) 224-4476

```
1 "Value" has different meanings.
 2
            WITNESS MICHAEL: Um --
 3
            CO-HEARING OFFICER DODUC: Hold on.
 4
            MR. BERLINER: I'm talking about economic
 5 value.
 б
           CO-HEARING OFFICER DODUC: Okay.
7
            MR. BERLINER: If you recall, the witness
 8 testified that, in assessing the -- the use of water
9 south of the Delta, that this would shift water over
10 to -- from the CVP to the State Water Project.
11
            And then he added that he's not even
12 considering the benefit to Southern California or State
```

13 Water Project M&I users from water transfers.

14 MR. RUIZ: That misrepresents his testimony.

15 He didn't state that in this -- in his rebuttal

16 testimony. He just mentioned that that part which he

17 did refer to was in his case in chief.

18 So the question is mis -- it's objectionable

19 as it misstates his testimony and it's outside the

20 scope of his rebuttal testimony.

21 CO-HEARING OFFICER DODUC: Perhaps you could

22 direct us, Mr. Berliner, to his rebuttal testimony.

23 MR. BERLINER: The -- I don't have the quote

24 right in front of me. But in the description of the

25 change in who was going to get water --

California Reporting, LLC - (510) 224-4476

1 Maybe we can go to the PowerPoint to the bar 2 chart slide. 3 (Exhibit displayed on screen.) MR. BERLINER: Can you scroll down on the --4 5 It's towards the end. б (Exhibit displayed on screen.) MR. BERLINER: Yeah. Go a little further. 7 8 (Exhibit displayed on screen.) 9 MR. BERLINER: Here we go. 10 I guess that's not really a bar chart. In conjunction with this slide, Dr. Michael --11 12 WITNESS MICHAEL: Um-hmm.

```
MR. BERLINER: -- did I understand your
```

14 testimony correctly that this is -- this was a slide

15 prepared by the Metropolitan Water District?

16 WITNESS MICHAEL: No. The previous ones were.

17 MR. BERLINER: Okay.

13

18 WITNESS MICHAEL: This is -- I prepared this

19 table, and the data in the table is derived directly

20 from presentation of the Metropolitan Water District.

21 MR. BERLINER: Thank you. Thank you for that

22 clarification.

23 And you're demonstrating that you think the

24 most likely outcome is the third row down, the bottom

25 row, rather than the middle row; correct?

California Reporting, LLC - (510) 224-4476

1 WITNESS MICHAEL: The bottom row is far more 2 likely than the middle row, you know, and I think 3 the -- it will be something very close to that bottom 4 row, if not on it. 5 MR. BERLINER: And when you presented this 6 slide, were you . . . 7 Did you comment that this represents a shift 8 of water from agricultural use south of the Delta to 9 M&I use south of the Delta? 10 WITNESS MICHAEL: I -- What I said was that 11 the CV is a predominantly agriculture-serving Project;

12 the State Water Project is predominantly an

13 urban-serving Project.

14 And so would that be exactly, you know, all

15 that . . . that -- I guess that's what I stated.

16 Another comment that I made is that this does

17 not include transfers from ag to urban within the State

18 Water Project, which are being discussed as well due to

19 cost.

20 So there could be additional ag-to-urban

21 transfers within that State Water Project piece.

22 MR. BERLINER: Are you aware that there are

23 currently ag-to-urban transfers within the State Water

24 Project?

25 WITNESS MICHAEL: Yes, I am.

California Reporting, LLC - (510) 224-4476

1 MR. BERLINER: And you're aware that the Kern 2 County Water Agency is part of the State Water Project? 3 WITNESS MICHAEL: Yes, I am. 4 MR. BERLINER: And Kern County Water Agency is 5 primarily an agricultural water -- agricultural water 6 user; correct? 7 WITNESS MICHAEL: Correct. 8 MR. BERLINER: And they enjoy the same 9 priority to State Project water as the M&I Contractors; 10 correct? 11 WITNESS MICHAEL: I believe -- I believe

12 that's the case.

```
13
            MR. BERLINER: And are you aware that Kern
14 County Water Agency received 25 percent of the State
15 Project water that shipped south of the Delta?
16
            WITNESS MICHAEL: Yes.
17
            MR. BERLINER: And are you aware that Met
18 received about 50 percent of the water shipped south of
19 the Delta?
20
            WITNESS MICHAEL: Yes.
21
            MR. BERLINER: The remainder is spread
22 throughout the rest of the South-of-Delta State Project
23 Contractors; correct?
24
            WITNESS MICHAEL: Yes.
25
            I'll point out one thing about the table,
              California Reporting, LLC - (510) 224-4476
```

1 though: SWP is -- column is summarizing the State

2 Water Project share. It's also summarizing the

3 additional Metropolitan Water supply that would come

4 from this 33 percent capacity, as they've described it.

5 And so, you know, perhaps that's too loose of

6 labeling on my part; that I just included

7 Metropolitan's water that they would receive from the

8 State Water Project, as well as benefits they would

9 receive from this Master Agreement all under SWP here.

10 So I apologize if that was too aggregated.

11 MR. BERLINER: Okay. Thank you for that

12 clarification.

```
14 provided by John Leahigh in Part 1 of this proceeding
15 relating to modeled additional shipments of water south
16 of the Delta during dry years?
17
            MR. RUIZ: I'm going to object as outside the
18 scope of this witness' rebuttal testimony.
19
            MR. BERLINER: The witness is talking about
20 the benefit of moving water to Southern Cal -- to South
21 of Delta ag and urban contractors and, in my view,
22 getting more water during a dry year is exactly where
23 the problem lies. And the testimony from Mr. Leahigh
24 went to that issue, among other things.
25
            CO-HEARING OFFICER DODUC: Dr. Michael.
              California Reporting, LLC - (510) 224-4476
                      www.CaliforniaReporting.com
```

Are you familiar with the testimony that was

```
1
            I -- Do you understand the question?
            WITNESS MICHAEL: Well, I think the question
 2
 3 was, am I familiar with this specific testimony, and
 4 the answer to that is -- is no.
 5
            MR. BERLINER: Okay.
 б
            WITNESS MICHAEL: The -- You said a lot more
7 after that, but your first -- initial question, the
 8 answer is no.
 9
            MR. BERLINER: Okay. In your discussion about
10 doing a cost benefit ratio, did Met, in arriving at
11 the . . .
```

12

Strike that.

14 "Met," I'm referring to the Metropolitan Water District

15 of Southern California.

16 Are you aware of whether Met performed a

17 cost-benefit analysis of the change in financing that

18 you're contending in your presentation?

19 WITNESS MICHAEL: Metropolitan did not present

20 a cost-benefit analysis -- or, I guess we prefer

21 benefit-cost analysis as economists -- to its Board for

22 the change in financing.

23 Now, when I say "benefit-cost analysis," I'm

24 referring to what that means to a professional

25 economist and what it means within documents such as

California Reporting, LLC - (510) 224-4476

1 the DWR economic analysis guidelines. 2 A -- A discussion of -- of benefits and an 3 estimate of costs, you know, as presented in the Met 4 Board, would not -- does not meet those standards. 5 MR. BERLINER: And do you think there's an 6 obligation on the part of Met to meet those standards? 7 WITNESS MICHAEL: So, I think that, you know, 8 there's a . . . I mean, the . . . The -- When you're on the Board of a Water 9 10 Agency, you know, you have a fiduciary duty to your --11 to your ratepayers. And I think that the analysis that 12 was presented, I think, did not reflect the standard

13 that one would expect for an investment of many

14 billions of dollars, the most expensive investment this

15 Agency's ever considered.

16 MR. BERLINER: Have you ever operated a Water

17 Agency?

18 WITNESS MICHAEL: No, I have not.

19 MR. BERLINER: Are you a farmer?

20 WITNESS MICHAEL: No, I'm not.

21 MR. BERLINER: Do you operate a business that

22 depends on water?

23 WITNESS MICHAEL: No, I do not.

24 (Pause in proceedings.)

25 MR. BERLINER: Have you ever heard the

California Reporting, LLC - (510) 224-4476

```
1 expression "Money is more valuable than water"?
 2
                   (Pause in proceedings.)
 3
            MR. RUIZ: I think you can --
            CO-HEARING OFFICER DODUC: Mr. Berliner?
 4
 5
            MR. BERLINER: No. I'm asking it this way
 6 because I'm talking to an economist.
7
            CO-HEARING OFFICER DODUC: Oh.
 8
                         (Laughter.)
 9
            MR. BERLINER: And -- And I guess you're
10 making my point. But let's let the witness respond.
            WITNESS MICHAEL: The expression? I've not
11
```

12 heard that expression.

```
13
            MR. BERLINER: Have you heard the expression
14 "Water is more valuable than money"?
15
            WITNESS MICHAEL: I think I've heard people
16 make a statement of that.
17
            MR. BERLINER: What do you understand that
18 expression to mean?
            MR. FERGUSON: I'm going to object as to
19
20 relevance.
21
            CO-HEARING OFFICER DODUC: Yes. Please
22 explain, Mr. Berliner.
23
            MR. BERLINER: Yes.
            We have an economist in front of us who is
24
25 contending that the description of this Project has
              California Reporting, LLC - (510) 224-4476
```

1 changed because of -- or is unstable because of a lack

2 of a benefit-cost analysis.

3 Benefit-cost analysis suggests, at least to 4 this non-economist, that you are weighing the benefits 5 of a Water Supply Project against the economic cost of 6 not doing the Project. 7 WITNESS MICHAEL: Mr. Berliner, I think you're 8 confusing benefit costs and financial feasibility 9 analysis, but they're very close together. 10 What I said is that the financial feasibility 11 analysis is necessary. I've also pointed out evidence

12 that shows why it's necessary.

13 A financial feasibility analysis, as I

14 testified in -- before the rebuttal, would predict that

15 the costs are prohibitive for agriculture.

16 Subsequently, we have seen agricultural water

17 agencies back away from a financial commitment to the

18 Project.

19 And, so, if a financial feasibility analysis

20 had been conducted properly, these events were entirely

21 foreseeable and should have been foreseen and the

22 implications of them considered.

23 CO-HEARING OFFICER DODUC: Okay. So now we're

24 really straying.

25 Let's get back to Mr. Berliner.

California Reporting, LLC - (510) 224-4476

1 (Pause in proceedings.) 2 MR. BERLINER: Are you suggesting there's some 3 legal obligation on -- in this proceeding to produce a 4 benefit-cost analysis? MR. KEELING: Calls for a legal conclusion. 5 б (Pause in proceedings.) 7 CO-HEARING OFFICER DODUC: Are you asking his 8 understanding of what's legally required, or what he 9 would recommend as an economist? 10 MR. BERLINER: No. I'm asking him what he --11 Let me rephrase the question.

12 In order for this Board to issue a permit, is

13 it your understanding that a benefit-cost analysis is

14 required before that permit can be issued?

15 WITNESS MICHAEL: Well, it is not my

16 understanding that it's required. It's my

17 recommendation that they do require it so that they can

18 properly consider these public interest and feasibility

19 issues.

20 MR. BERLINER: And are you aware of any

21 proceeding before this Board where a benefit-cost

22 analysis was considered by the Board as part of their

23 decision-making process?

24 WITNESS MICHAEL: What I'm aware of is the

25 decision-making process that is made about large

California Reporting, LLC - (510) 224-4476

2 And I know that benefit-cost analysis and 3 feasibility analysis, I know of no case of large 4 infrastructure projects where this has not been 5 conducted, with the exception of the WaterFix Project. б I don't know every -- what comes before this 7 Board and what doesn't when it comes to constructing 8 big projects. MR. BERLINER: Mr. Hunt, could we scroll down 9 10 to the --11 (Scrolling through document.)

MR. BERLINER: Go one more.

1 infrastructure projects.

12

13 (Scrolling through document.)

```
14
            MR. BERLINER: I might have -- Go another --
15 Next one.
16
             (Scrolling through document.)
17
            MR. BERLINER: Okay. That's it.
18
            Then we need to go the other direction.
            (Scrolling through document.)
19
20
            MR. BERLINER: Okay. That's the one. Thank
21 you.
            These -- This slide, if I understand
22
23 correctly, is a Met slide; correct?
            WITNESS MICHAEL: No. Actually, this -- this
24
25 slide is a summary of -- This is me summarizing some
              California Reporting, LLC - (510) 224-4476
                      www.CaliforniaReporting.com
```

1 points that Metropolitan staff made in a presentation, 2 and I provided the full presentation as -- in Exhibit 3 SDWA-316. So this is me trying to summarize some 4 content of that. 5 MR. BERLINER: Okay. Regarding the fourth 6 bullet down (reading): 7 "Negative impact to exchange 8 contractors (sic) and wildlife refuges (sic) . . . in some years." 9 10 Did you listen to the testimony of Rick Ortega 11 that was offered in this proceeding?

12 WITNESS MICHAEL: No, I didn't. I'm just

13 referencing things that were said in this Metropolitan

14 presentation.

15 MR. BERLINER: So you're not suggesting that

16 there -- there would be a negative impact on the

17 wildlife Refuge. You're just --

18 WITNESS MICHAEL: I'm just --

19 MR. BERLINER: -- echoing what Met said;

20 correct?

21 WITNESS MICHAEL: That's correct.

22 MR. BERLINER: Thank you.

23 And Met may not be entirely correct in what

24 they're contending; correct?

25 WITNESS MICHAEL: I'm not saying whether

California Reporting, LLC - (510) 224-4476

1 they're right or wrong. I'm just saying this is 2 what -- the information they gave to their Board. 3 MR. BERLINER: Thank you. 4 (Pause in proceedings.) 5 (Timer rings.) б CO-HEARING OFFICER DODUC: Mr. Berliner, how 7 much more time do you anticipate needing? 8 MR. BERLINER: I was just going through here. 9 And I'm two-thirds of the way done, so, other 10 than that kind of detour that we took towards the 11 beginning, I'm getting pretty close.

And I'm mindful you'd like to get people done

12

13 by -- by lunchtime, so I won't have too much more.

14 CO-HEARING OFFICER DODUC: So that would be 10
15 minutes?

```
16 MR. BERLINER: Probably.
```

17 Can we go to -- Mr. Hunt, can we go to Page 6

18 of Dr. Michael's testimony, please.

19 Dr. Michael, do you have your testimony handy

20 there?

21 WITNESS MICHAEL: Yes, I do.

22 MR. BERLINER: Great.

23 (Exhibit displayed on screen.)

24 MR. BERLINER: If you could flip to Page 6,

25 please.

California Reporting, LLC - (510) 224-4476

```
1
            (Exhibit displayed on screen.)
 2
            MR. BERLINER: And on Page 6, commencing at
 3 Line 18, you discuss (reading):
                  "Inconsistencies in WaterFix
 4
 5
            Operating Criteria.
 б
            Do you recall that part of your testimony?
 7
            WITNESS MICHAEL: Yes, I do.
 8
            MR. BERLINER: It extends over through the
9 bottom of Page 8, for reference.
10
            With regard to WaterFix operating criteria,
11 are you aware that the CWF H3+ operation was submitted
12 to review and approved by the National Marine Fisheries
```

```
13 Service?
```

```
14
            WITNESS MICHAEL: Yes.
15
            MR. BERLINER: And by the U.S. Fish and
16 Wildlife Service?
17
            WITNESS MICHAEL: Yes.
18
            MR. BERLINER: And a permit was issued by the
19 California Department of Fish and Wildlife?
20
            WITNESS MICHAEL: Yes.
21
            MR. BERLINER: And do you understand that DWR
22 will need to operate the Project in accordance with any
23 Operational Criteria that are issued by those fishery
24 agencies as well as by the Water Board?
25
            WITNESS MICHAEL: Yes.
              California Reporting, LLC - (510) 224-4476
```

1 MS. DES JARDINS: Excuse me. I have an objection that that misstates the 2 3 evidence, and I'd like to move to strike the question 4 and Dr. Michael's response. 5 CO-HEARING OFFICER DODUC: How does that 6 misstate the evidence? 7 MS. DES JARDINS: There are adopted cri --8 There are actual criteria adopted, in the NMFS -- in 9 the U.S. Fish and Wildlife Service opinion's, 10 problematic. 11 And the NMFS criteria clearly states that the

12 Proposed Action is subject to change.

14 don't believe you meant to imply -- Well, would you

15 like to clarify?

16 MR. BERLINER: I'll -- I'll rephrase the

17 question.

18 CO-HEARING OFFICER DODUC: Thank you.

19 MR. BERLINER: Dr. Michael, do you understand

20 that DWR will need to operate the Project in accordance

21 with Operational Criteria to be issued by the National

22 Marine Fisheries Service?

23 I'll take it one by one.

24 WITNESS MICHAEL: Yes.

25 MR. BERLINER: And with the Fish and Wildlife

California Reporting, LLC - (510) 224-4476

1 Service? 2 WITNESS MICHAEL: Yes. 3 MR. BERLINER: And with the Department of Fish 4 and Wildlife? 5 WITNESS MICHAEL: Yes. б MR. BERLINER: And by the Water Board? 7 WITNESS MICHAEL: Yes. 8 MS. DES JARDINS: Objection: Misstates the 9 evidence. 10 CO-HEARING OFFICER DODUC: In what way does it 11 misstate the evidence? MS. DES JARDINS: The Reclamation is not 12

13 operating to full D-1641 criteria.

14 CO-HEARING OFFICER DODUC: That was not his

15 question.

16 MS. DES JARDINS: Well, his question was:

17 Will the Project need to be operated in accordance with

18 the Water Board?

19 And that's -- It is -- It is an assumption.

- 20 CO-HEARING OFFICER DODUC: Overruled.
- 21 Move on, please, Mr. Berliner.
- 22 MR. BERLINER: Yup.

23 (Pause in proceedings.)

24 MR. BERLINER: Just scrolling through, I

25 actually think we've covered more than I thought we

California Reporting, LLC - (510) 224-4476

1 had. 2 (Pause in proceedings.) 3 MR. BERLINER: We have covered more than I 4 thought we had. I am finished. 5 CO-HEARING OFFICER DODUC: All right. Thank б 7 you, Mr. Berliner. 8 MR. BERLINER: Thank you very much. 9 CO-HEARING OFFICER DODUC: Mr. Jackson: Going 10 once. Going twice. Gone. Miss Des Jardins. 11 12 (Pause in proceedings.)

14 the change, let's do some time estimates.

15 Dr. Denton is up next. He has requested 20

16 minutes for his presentation, and given the details

17 involved, that is granted.

18 DWR has requested 45 minutes.

19 Ms. -- I have: Mr. Herrick -- I believe

20 Mr. Ruiz now -- for 30; Mr. Bezerra for 30;

21 Miss Nikkel, who is now Mr. Aladjem, for 10.

22 MR. ALADJEM: Madam Chair --

23 CO-HEARING OFFICER DODUC: Microphone, please,

24 Mr. Aladjem.

25 MR. ALADJEM: I'm David Aladjem, Downey Brand,

California Reporting, LLC - (510) 224-4476

www.CaliforniaReporting.com

1 on behalf of Tehama-Colusa Canal Authority and the City

2 of Brentwood.

3 Miss Nikkel's request was 10 minutes on behalf 4 of Tehama-Colusa Canal Authority. 5 I will also be having cross on City of 6 Brentwood totaling, I think, 45 minutes. 7 CO-HEARING OFFICER DODUC: 45 minutes. 8 All right. I have: Miss Meserve for 25; 9 Mr. Jackson who may or may not show for 25; and 10 Miss Des Jardins for 35. Does all that sound still? 11

12 MR. RUIZ: You can revise mine down to 15.

14 up a little bit for Mr. Aladjem. But that is still

15 roughly three and a half hours, over three hours.

16 So I'm going to say right now that we will end

17 the day with Dr. Denton and not go to Save the

18 California Delta Alliance.

19 So we will move that group to next week.

20 And since we're not calling on them today, my

21 understanding -- and, Mr. Brodsky, hopefully you're

22 watching and can confirm -- is that you are no longer

23 proposing to switch with Miss Suard.

24 My understanding was that if the Southern

25 California -- the Save -- the SCDA were to be called

California Reporting, LLC - (510) 224-4476

www.CaliforniaReporting.com

1 today, Miss Suard from Snug Harbor would take their

2 place.

12

3 So, unless we hear otherwise via e-mail from 4 Mr. Brodsky, I will consider that swap never happened. 5 And a reminder that we have confirmed 6 Dr. Paulsen for next Friday. 7 And I think that will be all the timekeeping I 8 need to do today. 9 Is there any other issues? Are there any 10 other issues? 11 MR. BERLINER: A question on that scheduling.

Is Dr. Paulsen going to be the only witness

14 CO-HEARING OFFICER DODUC: That is my

15 understanding based on the estimates I have for -- for

16 cross-examination.

17 MR. BERLINER: Okay.

18 MS. MESERVE: Just to -- If I could just

19 remind parties, since it looks like Save the California

20 Delta Alliance will be up first on Thursday, that

21 panel -- that next panel presented by CSPA and

22 San Joaquin and LAND is going to be moving to the end

23 of the lineup, just for anyone else watching, so that

24 wouldn't be the next one.

25 The next one I think would be --

California Reporting, LLC - (510) 224-4476

1 CO-HEARING OFFICER DODUC: That's correct. 2 MS. MESERVE: Thank you. 3 MR. KEELING: May I on -- on that point? 4 CO-HEARING OFFICER DODUC: Mr. Keeling. 5 MR. KEELING: And we very much appreciate the 6 accommodation you gave Mr. Nakagawa yesterday. 7 As I recall, you said we could put him on on 8 one of the last three days. That would be 29th, 30th 9 or 31st. 10 I thought it might be helpful to everybody, 11 all the parties and the witnesses, if we, at some point 12 at your convenience soon, put a -- put a date on that

13 instead of a range.

15

14 I was thinking the 29th would --

CO-HEARING OFFICER DODUC: I'm not going to

16 give a date certainty. I will just move Mr. Stroshane 17 and Mr. Nakagawa to the end of the order. 18 MR. KEELING: Okay. Then they're in the 19 last -- Thank you very much. CO-HEARING OFFICER DODUC: They're the last 20 21 for now. 22 MR. KEELING: Okay. 23 MR. BERLINER: Just before we leave the 24 scheduling. 25 With regard to next Thursday, I understand

California Reporting, LLC - (510) 224-4476

1 that's up in the air depending on how, I take it,

2 Tuesday and Wednesday go.

3 Do you have any idea as to when, for purposes

4 of witness appearances, we will get notice as to

5 whether we're on for Thursday or not?

6 CO-HEARING OFFICER DODUC: We will strive to

7 issue a notice early afternoon on Wednesday. I would

8 say by 2 o'clock on Wednesday.

9 MR. BERLINER: Great. Thank you very much.

10 CO-HEARING OFFICER DODUC: And if -- At this

11 time, it could be that we will go for half a day on

12 Thursday instead of the entire day. I don't -- I just

13 don't know yet what the plan will be.

14 But we will certainly provide more clarity.

15 And, actually, we will confirm, if necessary, that we

16 are proceeding on Thursday at a specific time by 2 p.m.

17 on Wednesday.

18 MR. BERLINER: Thank you very much.

19 CO-HEARING OFFICER DODUC: All right.

20 With that, Miss Des Jardins.

21 MS. DES JARDINS: Thank you. Dierdre

22 Des Jardins with California Water Research.

23 I'd like to go to Exhibit SDWA-321-R.

24 (Exhibit displayed on screen.)

25 MS. DES JARDINS: And I'd like to go to the

California Reporting, LLC - (510) 224-4476

1 bottom of Page 5, please. 2 (Exhibit displayed on screen.) 3 CROSS-EXAMINATION BY 4 MS. DES JARDINS: And you -- you state at this 5 time, outside of this proceeding, your extensive 6 current developments about financing this Project which 7 reveal changes in inconsistencies in the Project 8 Description. 9 Is -- Is that correct? 10 WITNESS MICHAEL: That's correct. 11 MS. DES JARDINS: So I wanted to ask: 12 Are you aware that the Petitioners' witnesses

13 have stated in -- have stated in testimony that, for

14 the purposes of this proceeding, the Adopted Project is

15 CWF H3+?

16 WITNESS MICHAEL: Yes. I think that's what

17 Miss Buchholz testified to.

18 MS. DES JARDINS: Are these statements

19 inconsistent with the external evidence you cite that

20 the Project Description is changing?

21 WITNESS MICHAEL: Yes, I believe that's my

22 testimony.

23 (Pause in proceedings.)

24 MS. DES JARDINS: Could the changes in the

25 Project Description in -- in -- change the deliveries

California Reporting, LLC - (510) 224-4476

1 to CVP Contractors from those that are in the CWF H3+

2 scenario?

WITNESS MICHAEL: Yeah. My testimony talks 3 4 about this being a negotiated Master Agreement. The 5 Master Agreement is not in CWF H3+. б And, according to the description of its 7 impacts by Met staff, it would affect the distribution 8 of -- of water that would be delivered to the Delta. 9 MS. DES JARDINS: And you -- Do you -- I 10 think -- Is it correct that you -- that Met's es --11 estimate is that reductions could be up to 450,000

12 acre-feet for the CVP?

```
13
            WITNESS MICHAEL: Compared to the No-Action
14 Alternative as it's represented in their presentation.
15
            MS. DES JARDINS: Do you -- do you think that
16 Reclamation would accept such a reduction?
17
                   (Pause in proceedings.)
            WITNESS MICHAEL: No. It's a -- I think that
18
19 will be -- that would be a source of significant
20 conflict. In the Met staff hearing that I provided
21 there, actually, Mr. Kightlinger said that -- you know,
22 referred to there would be a lot of potential conflict
23 as well.
24
            MS. DES JARDINS: You were asked about the
25 Petition before the Board.
```

California Reporting, LLC - (510) 224-4476

1 If this Board approves the Petition based on 2 the assertion that, for the purposes of -- based on the 3 CWF H3+ Project, that there could be future conflict? WITNESS MICHAEL: I don't think I understand 4 5 your question. б MS. DES JARDINS: Maybe -- Maybe the 7 connection to -- to . . . 8 Isn't . . . Doesn't the CWF H3+ Project, as operating 9 10 assumptions, have a lot of assumptions about how both 11 exports are shared between the Projects and how 12 obligations for in-basin use are shared for meeting

14 (Pause in proceedings.) 15 WITNESS MICHAEL: I'm not sure I understand. MS. DES JARDINS: Okay. As part of the public 16 17 trust, do you think that the Board has -- that the --18 that the deliveries, that the Board has sufficient --19 Given these external developments, do you think the 20 Board has adequate information to do -- to determine 21 that the Project will protect the public trust? 22 WITNESS MICHAEL: So --23 CO-HEARING OFFICER DODUC: Hold on, please. 24 MS. DES JARDINS: Yeah. 25 CO-HEARING OFFICER DODUC: Mr. Berliner. California Reporting, LLC - (510) 224-4476 www.CaliforniaReporting.com

1 MR. BERLINER: Objection: Beyond the scope of 2 his testimony. 3 He never discussed public trust. 4 MS. DES JARDINS: How about public interest? 5 WITNESS MICHAEL: Yeah. And -- And that's 6 what I was going to respond. 7 MS. DES JARDINS: Yeah. 8 WITNESS MICHAEL: I do not believe the Board 9 has information needed to weigh the public interest. 10 MS. DES JARDINS: And -- And it's specifically 11 because of the changes in the Project Description 12 outside it -- in -- outside of this proceeding.

14 that. But I think those changes that you refer to

15 are -- are very important and are -- are a very

16 substantial omission of information.

13

17 As I said, the Master Agreement is an

18 extremely important document that's -- we haven't seen

19 yet, and neither has the Board.

20 MS. DES JARDINS: Finally, I'd like to ask:

21 You -- You mentioned financing concern --

22 problems with the Project.

23 Are you -- Are you aware that Petitioners have

24 applied for a Federal loan for the Project?

25 WITNESS MICHAEL: Yes, I'm aware of that.

California Reporting, LLC - (510) 224-4476

1 MS. DES JARDINS: Could we bring up Exhibit 2 DDJ-326, please. (Exhibit displayed on screen.) 3 MS. DES JARDINS: And is this the statement of 4 5 interest -- statement of interest in applying for that 6 loan? 7 WITNESS MICHAEL: Yes. 8 MS. DES JARDINS: Are you aware that this 9 statement characterizes the Project cost as 10 19.9 billion? WITNESS MICHAEL: Yes, I'm aware of that. 11 12 MS. DES JARDINS: Is -- Do you think this cost

14 WITNESS MICHAEL: I think that --

15 CO-HEARING OFFICER DODUC: Mr. Berliner.

16 MR. BERLINER: The question's vague and

17 ambiguous.

18 MS. DES JARDINS: You discuss cost escalation

19 as being -- or -- or financing as being an issue for

20 the Project.

21 WITNESS MICHAEL: Um-hmm.

22 MS. DES JARDINS: And you also discuss the

23 potential cost escalation; correct?

24 WITNESS MICHAEL: Yes, I do.

25 MS. DES JARDINS: Is this part of the kind of

California Reporting, LLC - (510) 224-4476

2 WITNESS MICHAEL: No, actually, it's not. 3 I mean, the -- the -- the 19.9, it's -- I 4 think that's a better way to express the cost of the 5 Project than the -- expressing it in 2014 dollars, or 6 from a 2014 estimate. But it's a . . . 7 You know, it's the same cost estimate with an 8 inflation factor that one would use to estimate the 9 cash flow that would be necessary to actually build 10 a -- build a Project. 11 So I -- I -- That's not the -- So that's a

12 different way of expressing the cost.

1 cost escalation that you're referring to.

```
The cost escalation that I'd be concerned
13
14 about in our unanticipated cost in building the Project
15 or the bids come in higher than, you know, anticipated,
16 the types of things that we've seen with, you know,
17 high-speed rail, Bay Bridge, lots of large projects.
18
            MS. DES JARDINS: Are -- Are you aware the
19 Project is only at 10 percent design?
20
            WITNESS MICHAEL: That's what I've been told.
21
            MS. DES JARDINS: And -- And is that one of
22 the bases for your concern that cost might escalate?
23
            WITNESS MICHAEL: Yes, that and experience.
24
            MS. DES JARDINS: Experience with other large
25 projects?
```

California Reporting, LLC - (510) 224-4476

```
1
   WITNESS MICHAEL: Yes.
 2
          MS. DES JARDINS: How much has high-speed rail
 3 escalated?
 4
           CO-HEARING OFFICER DODUC: Outside the scope.
 5
   MS. DES JARDINS: Okay. I think that
 6 concludes . . .
7
          Oh. The -- I did have one other set of
 8 questions.
9
           With Met -- You mention a scenario where
10 MWD -- So MWD gets the entire 33 percent share Project.
11
            So, you're -- you're -- Let's pull up Exhibit
```

12 SDWA-322, Page 12.

13 (Exhibit displayed on screen.)

14 MS. DES JARDINS: Page 12, please.

15 (Exhibit displayed on screen.)

16 MS. DES JARDINS: You were on the correct

17 page.

18 (Exhibit displayed on screen.)

19 MS. DES JARDINS: There we go.

20 So, this one with the State Water Project

21 getting more water, would MWD seek to -- MWD,

22 obviously, has a financial interest in that they would

23 be purchasing the share of -- that 33 percent share.

24 Do you think it's likely that MWD would just

25 give that extra share to the other SWP Contractors?

California Reporting, LLC - (510) 224-4476

1 MR. BERLINER: Objection: Calls for 2 speculation; the question is vague. 3 WITNESS MICHAEL: Did it -- Well, I mean --4 CO-HEARING OFFICER DODUC: Hold on. 5 Sustained. б MS. DES JARDINS: Okay. Well, in your 7 experience as an economist, if MWD has a 30 percent 8 share of tunnel capacity, would MWD expect delivery of 9 the water from that share? MR. BERLINER: Objection: Lack of foundation. 10 No evidence this witness knows how Met 11 12 operates or what it does with its water supply.

```
13
            CO-HEARING OFFICER DODUC: Can you answer
14 purely from an economist perspective?
15
            WITNESS MICHAEL: Would they expect water in
16 return for their investment?
17
           MS. DES JARDINS: Yes.
18
            WITNESS MICHAEL: Yes. And per -- And
19 persuading the Board to vote for the additional
20 investment, its staff put the additional water supply
21 up front as the primary benefit.
            MS. DES JARDINS: And is that additional water
22
23 supply reflected in the CWF H3+ scenario?
24
            WITNESS MICHAEL: No.
25
            MS. DES JARDINS: Thank you.
              California Reporting, LLC - (510) 224-4476
```

1 That concludes my questions. 2 CO-HEARING OFFICER DODUC: Miss Meserve. 3 At this point, do you anticipate any redirect? MR. RUIZ: I don't think so, but I just want 4 5 to confer with cocounsel quickly. б CO-HEARING OFFICER DODUC: Quickly, while 7 Miss Meserve is conducting her cross. 8 (Pause in proceedings.) 9 MS. MESERVE: Good morning still. Osha 10 Meserve for Friends of Stone Lakes and LAND. 11 CROSS-EXAMINATION BY 12 MS. MESERVE: I just have a few questions

```
14 Just beginning on --
```

- 15 MR. BERLINER: Wait.
- 16 MS. MESERVE: -- page --
- 17 MR. BERLINER: Wait.
- 18 MS. MESERVE: Oh, I'm sorry. I thought she

19 told me to start.

20 CO-HEARING OFFICER MARCUS: They can't make

21 any objections when they're like that.

22 CO-HEARING OFFICER DODUC: Go, Miss Meserve.

23 CO-HEARING OFFICER MARCUS: We'll let you know

24 when they object.

25 MS. MESERVE: Mr.~Berliner is here.

California Reporting, LLC - (510) 224-4476

1 CO-HEARING OFFICER DODUC: Mr. Berliner will 2 object on their behalf. 3 MS. MESERVE: I just wanted you to clarify on 4 Page 8 of your testimony --5 Maybe we could bring that back up. б -- Line 22. 7 You mention that the calculation of shifting 8 the SWP share from 55 to 67 percent and the water 9 supply implications of that is inconsistent with the 10 water supply modeling for this Project in the hearing. 11 Why -- Why is it inconsistent?

WITNESS MICHAEL: I don't think . . .

12

13 So, the modeling for the hearing was made

14 under the 55/45 percent Project Description.

15 What Met staff is describing here is the water supply implication of a decision that was made just a 16 17 few months ago, after, you know, the case in chief even 18 for Part 2 was submitted. So this is a 156,000 acre-foot shift in water 19 20 supply that they described in -- that's in direct 21 response to an event that just happened this spring. 22 So there's no way that it could have been in this 23 modeling. MS. MESERVE: And, then, in thinking -- In --24 25 Does your answer take into account the full range of

> California Reporting, LLC - (510) 224-4476 www.CaliforniaReporting.com

1 proposed operations in the Petition, not just the 2 initial operating criteria shown in CWF H3+? 3 WITNESS MICHAEL: No. It doesn't consider the 4 full range of what's been considered. What it is, is, it's representing the 5 6 anticipated benefits of increasing off -- cost share by 7 merely stating what Met staff has told the public, 8 their ratepayers, what they'll receive in response to 9 these additional investment. 10 MS. MESERVE: And what kind of -- You 11 mentioned that this was -- this new information came

12 in, you know, well into this hearing.

```
What kind of analysis would you expect, in
13
14 your capacity as an economist, to see -- to take into
15 account this shift in the funding?
16
            WITNESS MICHAEL: What sort of analysis . . .
17
            MS. MESERVE: Of the implications to water
18 supply.
            WITNESS MICHAEL: Yeah. Well, I would -- I
19
20 mean, for economic analysis, it affects, you know,
21 feasibility and benefit costs. Who receives the water
22 matters.
            It also affects the distribution of benefits
23
24 from implementing the Project.
25
            MS. MESERVE: And that also would go to the
```

California Reporting, LLC - (510) 224-4476

1 willingness to pay for the Project? 2 WITNESS MICHAEL: Yes. 3 MS. MESERVE: At the top of Page 5, you 4 mention the public interest is in having consistent 5 Project descriptions used in the various deliberations. б When you mention the considerable public 7 interest, what -- what do you mean? WITNESS MICHAEL: Well, you know, the standard 8 9 for analyzing, considering large infrastructure 10 Projects are feasibility studies, like we've seen. You 11 know, just look around California at all the large

12 Projects that are proposed, from Temperance Flat, to

Everyone has a lengthy Feasibility Study 14 15 associated with it that analyzes economic, financial 16 and environmental effects under a consistent set of 17 assumptions. That's the -- That's the professional 18 standard. And for a Project of this magnitude, the 19 20 public interest demands that it be held to the highest 21 professional standards. 22 MS. MESERVE: And I apologize. It's actually 23 the top of Page 6. (Exhibit displayed on screen.) 24 25 MS. MESERVE: What are the negative

California Reporting, LLC - (510) 224-4476

1 implications or possible effects that you would be 2 concerned about if there is an inconsistent Project 3 Description in different proceedings? 4 WITNESS MICHAEL: It's --CO-HEARING OFFICER DODUC: What do you mean by 5 "different proceeding," Miss Meserve? 6 7 MS. MESERVE: Well, Dr. Michael mentions the 8 Project Description used in deliberations regarding 9 environmental permitting, water rights and finance. 10 So I guess I should just use the word 11 deliberations.

12 CO-HEARING OFFICER DODUC: I guess I'm

13 confused, because the only proceeding that is relevant

14 to us is this proceeding.

15 Unless --

16 MS. MESERVE: Well, I'm -- Yes. I'm trying to

17 understand better his -- He says there's a public

18 interest in ensuring a consistent description. And,

19 obviously, we're here in the Water Rights Hearing which

20 he references.

21 There's also other permitting decisions and

22 other finance decisions which Dr. Michael's been

23 discussing. So I'm just asking him to explain what --

24 what the dangers are of having different or

25 inconsistent descriptions in those different

California Reporting, LLC - (510) 224-4476

1 deliberations. 2 CO-HEARING OFFICER DODUC: So you're asking 3 him to explain that statement. MS. MESERVE: Yes. 4 CO-HEARING OFFICER DODUC: All right. 5 WITNESS MICHAEL: Yeah. So, the -- You know, б 7 talking about alternative decision-making venues. And, you know, this -- this venue, I 8 9 understand that public interest is -- is a broad term, 10 and I think we should be concerned about that. 11 These other decision-making venues are -- I

12 would argue there's a lot more people watching and

14 financing that are here today. 15 Those proceedings are setting expectations in 16 the public --17 CO-HEARING OFFICER DODUC: Please don't jinx 18 us, Dr. Michael. WITNESS MICHAEL: I'm sorry. I'm sure the 19 20 ratings are very high on the Webcast. 21 (Laughter.) 22 WITNESS MICHAEL: You know, I turn in 23 sometimes, so . . . But I'm saying that those proceedings are 24 25 setting public expectations for what this Project will California Reporting, LLC - (510) 224-4476 www.CaliforniaReporting.com

13 interested in Board votes for billions of dollars of

```
1 do and what it will deliver.
 2
            Those public -- Those expectations are very
 3 important in how the Project is operated. And
 4 whether -- You know, how decisions will be made,
 5 particularly in this case when so many things have --
 6 it seems so many decisions have been postponed to the
 7 future.
 8
            And, in fact, you know, Metropolitan has . . .
 9 clearly expressed in their documents to the Board that
10 these H3+ operating criteria were just an assumption
11 for environmental documents and -- that are unlikely to
```

12 be the way the Project is operated.

```
14 expectations of the -- of the public.
```

15 The public is -- and, you know, investors are

16 putting, you know, billions of dollars in bonds in

17 response to those presentations. I don't think they --

18 they understand the detailed permits.

19 MS. MESERVE: And on the top of Page 7, you

20 discuss the MWD representations regarding adaptive

21 management in their presentation.

22 Do you know what adaptive management is?

23 WITNESS MICHAEL: I'm not an expert in it, but

24 I know what it is.

25 MS. MESERVE: And what is it, in your opinion?

California Reporting, LLC - (510) 224-4476

1 WITNESS MICHAEL: It sets up a process through 2 which the operation or rules, I guess, of how the 3 Project could operate in the future, would be 4 determined in the future. MS. MESERVE: And, in your opinion, do you 5 6 think that adaptive management could be used to try to 7 improve the financial viability of the Project after it 8 was constructed, given the financial risks you've 9 discussed in your testimony? WITNESS MICHAEL: I will say that's not only 10 11 my opinion, that is what Metropolitan's staff told

12 their Board.

```
MS. MESERVE: And how -- How is that? Could
13
14 you explain that, please.
15
           WITNESS MICHAEL: I'm --
16
            MS. MESERVE: What they were --
17
            WITNESS MICHAEL: Do you want me --
18
            MS. MESERVE: What they --
            WITNESS MICHAEL: Yes.
19
            MS. MESERVE: -- told their Board about
20
21 adaptive management.
22
            WITNESS MICHAEL: Yeah. I mean, we could go
23 through an exhibit, I can show a quote as an example
24 from them.
25
            But --
```

California Reporting, LLC - (510) 224-4476

```
1
    MS. MESERVE: Go ahead.
 2
                  (Pause in proceedings.)
 3
         WITNESS MICHAEL: I'm looking for . . .
           MS. MESERVE: Is that in your PowerPoint?
 4
 5
           WITNESS MICHAEL: No. No, no, it's not in my
6 PowerPoint. It's just sort of an exhibit.
7
                  (Pause in proceedings.)
           WITNESS MICHAEL: Yeah, I guess -- Yeah, 316.
 8
9 Sorry.
10
           MS. MESERVE: SDWA-316?
11
           (Exhibit displayed on screen.)
           WITNESS MICHAEL: Yeah. 316, Page 26.
12
```

13

So -- I mean, this is an example of -- The 14 15 line where it says "Patterson" and "no." And this is a 16 description of the . . . For example, saying that the 17 (reading): ". . . Bypass flows . . . I would say, 18 incredibly restrictive right now." 19 20 He's referring to, again, what's in the 21 documents, you know (reading): 22 "This is coming out of the blocks . . ." 23 And, you know, by saying that those are the 24 25 rules coming out of the blocks. He's expressing an California Reporting, LLC - (510) 224-4476

1 expectation that these will get better. 2 It is (reading): ". . . More . . . likely that (sic) it 3 4 would stay the same or perhaps get a little better than that." 5 б You know, so, I guess that's one example that 7 I've seen. And, you know, the Met White papers are --8 Sometimes it's just a matter of emphasis that's -- you 9 know, putting adaptive management first in these --10 describing these criteria as an assumption made for 11 modeling.

It was a bit different than the emphasis. For

12

13 example, Miss Buchholz's testimony that describes the

14 specifics of H3+ operating criteria and, you know,

15 adaptive management is sort of secondary in the way she

16 presents.

17 MS. MESERVE: So, in this instance, adaptive

18 management would be used the way it's described here in

19 your exhibit, to reduce the -- the initial operating

20 criteria requirements in order to deliver more water?

21 Is that your understanding?

22 WITNESS MICHAEL: That's my understanding. I

23 don't know if that's the best example but that's one

24 that was sort of top of mine because I saw that

25 recently.

California Reporting, LLC - (510) 224-4476 www.CaliforniaReporting.com

1 MS. MESERVE: And are you aware that 2 Metropolitan, through the State Water Contractors, 3 would be represented in the Adaptive Management Working 4 Group? 5 WITNESS MICHAEL: Yes. That's another point 6 that Met staff made to their Directors, that they would 7 be represented in that. 8 MS. MESERVE: Let's see. Looking at Page 12 of your testimony, I 9 10 believe. Back to the SDWA-321-Revised. 11 (Exhibit displayed on screen.) 12 MS. MESERVE: You discuss that the CVP farmers

13 may not lease back any capacity; right?

14 WITNESS MICHAEL: Yes.

15 MS. MESERVE: Is it your opinion that the CVP

16 Contractors would need to financially contribute to --

17 in order to receive water through this Project?

18 WITNESS MICHAEL: That is how Met staff has

19 represented the Master Agreement. So that's my --

20 that's my understanding based on their statements.

21 MS. MESERVE: And going backwards to Page 11,

22 you mention that, under the current funding

23 arrangement, there would be impacts to CVP, ag, if the

24 Project was implemented.

25 If -- If we could go back to the exhibit that

California Reporting, LLC - (510) 224-4476 www.CaliforniaReporting.com 1 Ms. Des Jardins had pulled up, which I believe she

2 named DDJ-326, which is the WIFIA loan letter of

3 interest.

4 (Exhibit displayed on screen.)

5 MS. MESERVE: And go to Page 23 of that

6 document.

7 (Exhibit displayed on screen.)

8 MS. MESERVE: Are you familiar with the

9 mention in this document -- if we could scroll down a

10 little bit -- to an agreement being negotiated between

11 DWR and Reclamation to avoid impacts to CVP?

12 WITNESS MICHAEL: Yes, I'm familiar with that.

14 be the need for this agreement given your understanding

15 of impacts on the CVP?

16 WITNESS MICHAEL: So, this is the first

17 mention that I've ever seen of any agreement being

18 negotiated to avoid impacts to -- to CVP.

19 So, if this document had been available when I

20 wrote my rebuttal testimony, I think I would have cited

21 to it and -- because, you know, one of my conclusions

22 is that it appears this Master Agreement would be

23 harmful -- have negative impacts on CVP.

24 And the fact that there are new negotiations

25 to avoid negative impacts -- apparently new because

California Reporting, LLC - (510) 224-4476

1 this is the first we've heard of them -- I would 2 interpret that as -- as evidence that -- additional 3 evidence that there could be some negative impacts. MS. MESERVE: And -- Yes. 4 5 You discuss the Master Agreement on Pages 9 6 and 10 of your testimony. 7 And is it your understanding that this is a 8 separate agreement from the Master Agreement? 9 WITNESS MICHAEL: It appears . . . That 10 appears to be the case. 11 MS. MESERVE: And, in your opinion, might 12 the -- going back to the agreement mentioned here in

13 the WIFIA loan letter of interest -- would -- could

14 those terms of that agreement discussed affect the

15 financial viability of the Project as well?

16 WITNESS MICHAEL: It's certainly possible. I

17 think that's why it's disclosed here in the WIFIA Loan

18 Application.

19 I think it -- I think it could affect it.

20 MS. MESERVE: And what kinds of terms would

21 you expect to be included in this kind of agreement to

22 try to avoid impacts to CVP?

23 CO-HEARING OFFICER DODUC: Okay. That's going

24 way too far. I've been very tolerant, Miss Meserve,

25 but that is outside the scope.

California Reporting, LLC - (510) 224-4476

1 Cross-examination is not -- cannot expand the 2 scope. The scope is still limited to Dr. Michael's 3 rebuttal testimony. 4 MS. MESERVE: You discuss impacts to the CVP 5 water supply in your testimony as a result of 6 implementation of the Project as you understand it. 7 Are there any other impacts that -- that would 8 be related to the water supply changing from an 9 economic standpoint? 10 WITNESS MICHAEL: Yeah. I mean, a change in 11 the water supply could affect the amount of 12 agricultural production, you know, groundwater

13 utilization, and, you know, revenue in the affected

14 areas and everything associated with that.

15 MS. MESERVE: So, the last portion of your

16 testimony, starting on Page 12, discusses the --

17 Dr. Shires' testimony about the economic impacts to

18 Westlands.

19 Is it -- Can you -- Given your concern that

20 there would be negative impacts from implementing the

21 Proposed Project, and then Mr. Shires' -- Dr. Shires'

22 testimony that it would be negative to not implement

23 it, can you describe better the difference between

24 those two opinions given the negative impacts you're

25 concerned about?

California Reporting, LLC - (510) 224-4476

1 WITNESS MICHAEL: I don't -- I don't recall 2 that Dr. Shires' testimony said that it would be 3 negative to not implement it. 4 One of my comments was that, you know, his 5 testimony doesn't really comment at all on the impacts 6 of implementing WaterFix directly. It just discussed 7 his assessment of the general contribution to Westlands 8 and that, if there's more agriculture in Westlands, 9 these contributions are larger, and if there's less, 10 it's smaller. 11 MS. MESERVE: So you, on Page 13, Lines 6 12 and 7 of your testimony, you would tend to agree that,

13 if the -- if the implementation of the Project led to

14 risings water prices or restricted supplies, it would

15 result in fewer crops in general, then.

16 WITNESS MICHAEL: Yeah. What I said here -- I

17 mean, Dr. Shires doesn't specifically say, in my

18 recollection -- it's been actually a little while since

19 I read his testimony -- but I don't believe he says

20 specifically that implementing WaterFix will be a

21 positive or a negative.

22 So, based on things that he does say in his

23 testimony I think indirectly infer that it would be a

24 negative, potentially a negative.

25 MS. MESERVE: So his testimony may support

California Reporting, LLC - (510) 224-4476

1 your overall conclusions that you present here today

2 with respect to impacts on the CVP, then?

WITNESS MICHAEL: Yeah. I mean -- Well, I
disagree for some of the -- some of the -- the sort of
magnitude of the contribution that he states in his
testimony, I believe, is a bit exaggerated.
And even if it were sort of dialed back a bit,
other than that, I don't -- I don't see any confusion
at all.
MS. MESERVE: And then just . . . one last

11 question just back on Page 6 at the top where you

12 mention the deliberations regarding permitting.

```
13
            What's your impression in terms of the --
14 thinking back on the WIFIA Letter of Intent that we
15 looked at a few minutes ago -- of the Project readiness
16 and closeness to completion of permitting?
17
            Do you -- Is it your understanding that that
18 is still very much underway or that it's nearing
19 completion as alleged in the Letter of Intent?
            CO-HEARING OFFICER DODUC: I believe that's
20
21 outside the scope of his rebuttal testimony.
22
            MS. MESERVE: He does discuss the ongoing
23 deliberations, but . . .
24
            We shall end it with that. Thank you.
25
            CO-HEARING OFFICER DODUC: Have you decided,
              California Reporting, LLC - (510) 224-4476
```

1 Mr. Ruiz? 2 MR. RUIZ: Yes. We have no redirect. 3 CO-HEARING OFFICER DODUC: All right. In that 4 case -- I can't remember now. I don't believe this 5 concludes your rebuttal testimony. б MR. RUIZ: No, it does not, because 7 Mr. Burke's coming back --8 CO-HEARING OFFICER DODUC: All right. 9 MR. RUIZ: -- presumably. 10 CO-HEARING OFFICER DODUC: So thank you, 11 Dr. Michael.

12 WITNESS MICHAEL: Thank you.

13	CO-HEARING OFFICER DODUC: With that, we will
14	take our lunch break.
15	We will return at 1:15 when we will get to
16	Dr. Denton.
17	(Lunch recess at 12:13 p.m.)
18	
19	
20	
21	
22	
23	
24	
25	

California Reporting, LLC - (510) 224-4476

www.CaliforniaReporting.com

1	AFTERNOON SESSION
2	000
3	(Whereupon, all parties having been
4	duly noted for the record, the
5	proceedings resumed at 1:15 p.m.
6	on August 17, 2018)
7	000
8	CO-HEARING OFFICER DODUC: It is 1:15.
9	Welcome back. All right.
10	We now turn to the presentation of direct
11	testimony by Dr. Denton. Please go forward
12	Oh, Ms. Morris, Mr. Berliner.
13	MR. BERLINER: Yes. I have a motion to strike
14	various parts of Dr. Denton's testimony. It might be
15	best if we saw it.
16	CO-HEARING OFFICER DODUC: Actually, I'm
17	opening it on my laptop right now.
18	MR. BERLINER: If you would go to the
19	PowerPoint, Mr. Hunt, on which is Exhibit 50, and go
20	to Slide 5.
21	And we would move to strike No. 3.
22	And then if you can go to the next page,
23	Mr. Hunt. Keep going. Oh, no, wait. Here we go.
24	Wait.
25	So this discusses the boundaries, and while we

California Reporting, LLC - (510) 224-4476 www.CaliforniaReporting.com

1 discussed adaptive management in Part 2 testimony, we 2 did not discuss the boundaries. That was in Part 1. 3 And if you can go to --4 CO-HEARING OFFICER DODUC: Are you moving on 5 to the next objection or -б MR. BERLINER: Well, they're all part of a 7 motion to strike. So you want me to take them one by 8 one? 9 CO-HEARING OFFICER DODUC: Yes. 10 MR. BERLINER: Okay. Then I -- there are a series of them. 11 CO-HEARING OFFICER DODUC: Because I would 12 13 like to hear a response before we move on to the next 14 one. 15 MR. BERLINER: There's also corresponding 16 testimony. CO-HEARING OFFICER DODUC: It might be helpful 17 18 to look at the testimony. 19 MR. BERLINER: Yes. So if we could go to 56. CO-HEARING OFFICER DODUC: 56? You mean 51? 20 MR. BERLINER: It's Exhibit 51, but there's --21 22 we've got a new -- there's a new exhibit as well. 23 Do you have the new exhibit, the errata, which is 56? 24 25 MR. SIPTROTH: We provided a copy of Exhibit

56-Errata to Mr. Hunt. We were planning on addressing
 that in our opening, but Mr. Hunt does have it.

3 MR. BERLINER: I -- oh, why don't I wait with 4 that one, and we'll come back to that.

5 So since you have the testimony open, if you 6 could go to Page 10, Line 1. And this is to strike the 7 testimony on Page 10, Line 1 through Page 11, Line 7, 8 which again is a boundary discussion.

9 And while I think it would have been fair for 10 the witness to say that through adaptive management you 11 could have a range between Boundary 1 and Boundary 2, 12 this testimony goes far beyond that and goes into the 13 effects of Boundary 1, which was not discussed in our 14 testimony.

15 There's a similar objection, basically same 16 grounds, on another page. I could move forward to 17 that, on Page 17. And that would be starting at 18 Lines -- Line 5 through 16, again, discussions about 19 boundary analysis.

None of our witnesses went beyond just to mention that through adaptive management that was the range. There was no discussion below that level, which this -- which this testimony goes into. So they're not rebutting testimony that was provided by the petitioners.

1	And I'll stop there with that objection. So
2	those all go to Boundary 1, and the errata for 56
3	raises the same issue.
4	CO-HEARING OFFICER DODUC: All right. Let's
5	actually hear from the counsel, Mr
6	Is it Siptroth?
7	MR. SIPTROTH: Yes, Siptroth.
8	Good morning. Just a quick clarification.
9	Page 17, Lines 5 to 15?
10	MR. BERLINER: To 16.
11	MR. SIPTROTH: So 16 begins a new paragraph.
12	MR. BERLINER: So the pagination may well,
13	yeah, this references yeah, so 15.
14	MR. SIPTROTH: Okay. So Ms. Buchholz in her
15	testimony does address operational ranges and boundary
16	analyses in her at least in her Slide 5 of DWR-1008.
17	We think that this is properly within the realm of
18	rebuttal testimony to that portion of Ms. Buchholz's
19	Dr. Buchholz's?
20	CO-HEARING OFFICER DODUC: Ms.
21	MR. SIPTROTH: Ms. Buchholz's testimony.
22	CO-HEARING OFFICER DODUC: Hold on. Are you
23	saying this particular section of Dr. Denton's rebuttal
24	testimony to which Mr. Berliner just moved to strike is
25	in response to Ms. Buchholz's DWR-1008, Slide 5?

1 MR. SIPTROTH: She raises a boundary analysis in that slide and --2 3 CO-HEARING OFFICER DODUC: May I see 1008, Slide 5. All right. 4 Well, I can see it now, but let's put it on 5 б the screen for everyone else to see. All right. 7 As I recall -- well, before I say what I recall, anyone else wants to chime in? 8 9 MS. MESERVE: Do you want to take her or us 10 first? CO-HEARING OFFICER DODUC: You guys. 11 12 MS. MESERVE: Yes, so Slide 5 mentions the 13 boundary analysis as well as Slide 7 shows -- if we could maybe just push up to that of this same 14 15 PowerPoint -- talks about the range of alternatives in 16 Part 1 and Part 2. And so, you know, this has been a point of 17 18 confusion and some contention in Part 2 and especially 19 in rebuttal. But the petitioners are seeking a permit that would allow them to go all the way from Boundary 1 20 21 to Boundary 2, and that's consistent in Part 2 of their 22 testimony as well. So just because the DWR, in their case in 23 24 chief for Part 2, chose to focus on trying to explain 25 why H3+ was not that much different than some of the

other scenarios that they had proposed for initial
 offering criteria, that does not mean that protestants
 cannot discuss the range of alternatives that
 petitioners are actually seeking a permit from this
 Board to implement without further amendment or process
 from this Board.

7 It's essential that we be able to address the full range of alternatives that the permit is seeking. 8 9 Now, if DWR wants to limit the permit request -- which 10 they haven't -- to the initial operating criteria without having this full range between the boundaries 11 12 as they've defined them in this figure and elsewhere 13 throughout their testimony, then, you know, they could make that change, but that hasn't happened. 14

So it's essential that we need to be able to rebut everything that they're proposing to get a permit from your Board to do.

18 CO-HEARING OFFICER DODUC: Mr. Aladjem.

MR. ALADJEM: Madam Chair, David Aladjem, City
of Brentwood -- David Aladjem, City of Brentwood.

If I might add to Ms. Meserve's concerns, Dr. Denton's testimony very clearly responds to claims in the case in chief of DWR which says that the operation of the project as proposed will not have an unreasonable adverse impact on fish and wildlife. That

1 is one of the central issues of this hearing.

2	What he is saying is, if you get beyond the
3	H3, H4 range and actually operate to Boundary 1, which
4	they admitted in this PowerPoint they could operate
5	to in Part 2 then he's alleging that there would
6	be serious adverse impacts on the environment resulting
7	from the project. That is central to this case and,
8	therefore, the objection should be overruled.
9	CO-HEARING OFFICER DODUC: Ms. Des Jardins.
10	MS. DES JARDINS: I support I support the
11	previous arguments, and I also wanted to add that the
12	range shown is just the expected range for the initial
13	operations of the project which, if you go look at U.S.
14	Fish and Wildlife Service or National Marine Fisheries
15	Service, they advise that those operations have not
16	been finally determined.
17	So Boundary 1 and Boundary 2 are clearly
18	within the range of initial things, and they
19	represent to the extent that they represent points
20	that the petitioners say they've analyzed, people need
21	to be able to present rebuttal testimony about impacts
22	to fish and wildlife.
23	CO-HEARING OFFICER DODUC: Ms. Morris.
24	MS. MORRIS: Thank you. I would join the
25	objection, and I would just like to point out that this

slide clearly indicates in red what were the boundaries
 for 1, and then moves down. And it was provided as
 context, not as a discussion of Boundary 1 and
 Boundary 2.

5 If you look at Dr. Denton's testimony on Page 10, it's talking about specifically water quality б 7 impacts in the Delta in terms of Boundary 1 and goes on to Page 11 to say the corresponding impacts on legal 8 9 users of water would be larger than those disclosed by 10 petitioners in Part 1, which is not accurate because the Boundary 1 water quality was discussed, and there 11 12 was an opportunity for rebuttal.

And corresponding to that is CCC-SC-56-Errata.
If you look at the slide, it clearly is dealing with EC
and water quality.

16 The second portion of this slide is dealing with Boundary 1 outflow, and if you look at the 17 18 corresponding testimony in Dr. Denton's testimony, that 19 whole section of his testimony beginning on Page -sorry, flipping -- Page 31, the entirety of Section 11 20 21 actually doesn't rebut any testimony. All it does is 22 provide a summary of his case-in-chief testimony, a 23 Water Code, and then beginning on Line 21 just states, 24 "The petitioner's case in chief for Part 2 of this 25 hearing again failed to provide evidence in a

1 form...that would allow the State Board to determine whether it's consistent with the 2010 inflow and 2 3 outflow recommendations of the State Water Resources Control Board and the Department of Fish and Wildlife." 4 5 Again, there was no testimony from the б petitioners on these issues, and this is outside the 7 scope of the Part 2 rebuttal. 8 CO-HEARING OFFICER DODUC: Have you just 9 expanded Mr. Berliner's. . . 10 MR. BERLINER: Yes, she has --MS. MORRIS: I didn't expand it. 11 CO-HEARING OFFICER DODUC: She just did. 12 13 MS. MORRIS: He didn't say this one, but I only referenced it because it's also referenced on the 14 15 exhibit. 16 My point is --CO-HEARING OFFICER DODUC: Which he also 17 18 withdrew because we're focusing on just one thing right 19 now. MR. BERLINER: That would have been my last 20 21 one, so. . . 22 CO-HEARING OFFICER DODUC: Okay. I would like 23 for you, Mr. Berliner, to respond to Mr. Aladjem's 24 point. 25 MR. BERLINER: So I agree with the

characterization that these are important issues, and
 if they felt that they were important enough, that's
 what their case-in-chief presentation in Part 2 should
 have focused on.

5 They're trying to come in in the rebuttal 6 phase to try to rebut testimony that doesn't make the 7 argument that they're now trying to make. That's the 8 problem.

9 It's outside the scope of the testimony. It's 10 bringing in new arguments and, if they felt these were 11 important, they should have introduced them as part of 12 their case in chief, which they neglected to do.

13 So now they're trying to come in, bring a 14 whole new subject in. That diagram that was up, that 15 showed ranges. You could argue that for anywhere on 16 that chart. It applies equally then. If we're going 17 to open up impacts of Boundary 1 or impacts of Boundary 18 2 because they're important in a rebuttal phase, then 19 everything is opened up.

And that -- you've made, over and over, the point: We are bound by the scope of the testimony. And this exceeds the scope of that testimony.

23 CO-HEARING OFFICER DODUC: Mr. Aladjem.
24 MR. ALADJEM: In rebuttal to Mr. Berliner,
25 there are two issues here, first of all, in terms of

1 water quality.

2 It looks like it's on --

3 CO-HEARING OFFICER DODUC: Perhaps get closer,4 please.

5 MR. ALADJEM: Okay. In response to 6 Mr. Berliner, first of all, there are two issues here. 7 One is water quality, and water quality was extensively 8 discussed both in Part 1 but also in terms of its 9 impact on fish and wildlife earlier in Part 2. That is 10 absolutely proper rebuttal.

Second of all, in terms of Mr. Berliner's 11 12 point about some of the charts of Dr. Denton which he 13 said could open up the entire case again, this is yet another case where the lack of operational criteria on 14 15 the part of the Department, on the part of the 16 petitioners, gives us no ability in a case in chief to say what they're doing. The only proper way to do that 17 18 is on rebuttal, and that is what Contra Costa County is 19 doing.

20 CO-HEARING OFFICER DODUC: Ms. Des Jardins. 21 MS. DES JARDINS: I support Mr. Aladjem's 22 point and note that the operational scenario CWF H3+ 23 and its relationship to other scenarios presented in 24 this proceeding was absolutely unavailable until 25 petitioners put on their case in chief.

1 So to then say, "oh, you can't discuss the relation to that, to these other scenarios because, you 2 3 know, the other scenarios were available previously," 4 yes, they were, but nobody knew -- nobody knew what was 5 actually going to be asserted were the operations of б the project in DWR's case in chief in Part 2. 7 CO-HEARING OFFICER DODUC: Mr. Siptroth, I'll give you the last word -- or Dr. Denton, for that 8 9 matter. 10 MR. SIPTROTH: Thank you. I guess as Ms. Des Jardins has pointed out, we were unaware of the 11 12 operational criteria of CWF H3+ until the case in chief was filed in November. The deadline for filing that 13 was coterminous with our deadline for filing our case 14 15 in chief in Part 2. And so, you know, we couldn't have 16 built in our concerns about CWF H3+ into our case-in-chief testimony. 17 18 I'd also like to point out that Dr. Denton has 19 cited Part 2 testimony of the petitioners as the basis for his rebuttal testimony. 20 21 CO-HEARING OFFICER DODUC: Yes, that is the 22 only thing I'm interested in. 23 MR. SIPTROTH: Thank you. 24 CO-HEARING OFFICER DODUC: So if you could 25 point me to specifically what Dr. Denton is rebutting.

1 MR. SIPTROTH: Page 10, Line 5 of his 2 testimony CCC-SC-51, he refers to Exhibit DWR-1010. 3 If you want to -- if you need to bring it up, I'll wait on the page number. 4 It's Page 9, Line 3. 5 б CO-HEARING OFFICER DODUC: Yes, and all that 7 line says is that it was presented in Part 1. MR. BERLINER: Well, and Boundary 1 and 8 9 Boundary 2 are not further discussed in Part 2. 10 CO-HEARING OFFICER DODUC: I'm responding to Mr. Siptroth. It says that, yes, the boundary analysis 11 12 as defined by Boundary 1 and 2 was presented in Part 1. 13 MR. SIPTROTH: The adaptive management range remains between Boundary 1 and Boundary 2, is 14 15 Dr. Denton's understanding -- without more specific 16 operating criteria. CO-HEARING OFFICER DODUC: And if I read 17 18 further into Lines 7 through 9, I think I just see 19 Mr. Berliner's point. 20 Dr. Denton? WITNESS DENTON: Yeah, I think my point would 21 22 be that the focus in this rebuttal phase by DWR was to focus you in on -- well, in Part 2 is to focus you in 23 24 on the project CWF H3+, saying this is the project 25 that's the adopted one; forget about all the other

> California Reporting, LLC - (510) 224-4476 www.CaliforniaReporting.com

alternatives. All you need to worry about is the
 effects of that particular project.

3 And my point is saying that, no, that there is 4 still this adaptive management range which was established in Part 1 which is -- should be taking your 5 б focus off CWF H3+ and expanding it to say that that may 7 not be in fact the project that you -- that is going to 8 occur, and it could well drop all the way down, in 9 terms of impacts on the environment, to Boundary 1. 10 So it's saying that there's an absence of discussion of Boundary 1 and maybe even 2 in Part 2, 11 12 they should -- they should say it's CWF H3+, plus or 13 minus Boundary 1 and Boundary 2. CO-HEARING OFFICER DODUC: All right. Let's 14 15 go ahead and take a break while we discuss this. Thank 16 you. MR. BERLINER: And while you're taking a 17 18 break, there was also that reference to Pages 31 and 19 32. So you might want to discuss that as well. CO-HEARING OFFICER DODUC: Hold on. 20 21 MR. BERLINER: Because I was going to raise 22 that, so. . . 23 CO-HEARING OFFICER DODUC: This is the one 24 that Ms. Morris --25 MR. BERLINER: Yes.

1	CO-HEARING OFFICER DODUC: You too?
2	All right. Let's go ahead and discuss that.
3	MR. BERLINER: Oh, my I was going to raise
4	the same issue as I was going to raise the same
5	issue as Ms. Morris with regard to Line Page 31,
6	Line 3, through 32/14. That's just a summary of
7	testimony arguing that the petitioners didn't provide
8	any evidence. And we move to strike that as well.
9	CO-HEARING OFFICER DODUC: And Mr. Siptroth,
10	your response to that motion?
11	MR. SIPTROTH: Mr. Denton's testimony here, I
12	believe it's on the new data presented as CWF H3+. I
13	believe it's within his expert opinion to to make
14	this rebuttal testimony.
15	And again, we could not have built it into our
16	case in chief for this Part 2 hearing. It's properly
17	rebuttal presented as rebuttal testimony today.
18	CO-HEARING OFFICER DODUC: All right. Anyone
19	have questions?
20	MR. BERLINER: Just to clarify, in the first
21	paragraph on Page 31, he arg he sets forth what he
22	did in his case-in-chief testimony. The second
23	paragraph quotes the statute. And the third paragraph
24	is the argument about petitioner's case in chief. And
25	there's no citations in that respect, and it's just

1 pure argument.

2 CO-HEARING OFFICER DODUC: So he's rebutting not what's in petitioner's case in chief but what is 3 4 not in, is my understanding. 5 MR. SIPTROTH: That's my understanding of the testimony. He does say that -- what they failed to б 7 provide. 8 CO-HEARING OFFICER DODUC: Do you have a 9 question? 10 MR. DEERINGER: My only question for Dr. Denton or Mr. Siptroth would be on that portion of 11 12 the exhibit, whether there's -- other than observing 13 what is not a part of petitioners' Part 2 case in chief, is there any other testimony that you can point 14 15 to that draws on Dr. Denton's expertise? 16 MR. SIPTROTH: Expertise in what? I'm sorry. I'm not following the question. 17 18 MR. DEERINGER: So the Board -- the Hearing 19 Officer's prior rulings on rebuttal have distinguished between observations about what's in the record and 20 21 argument about what's in the record, on the one hand, 22 versus expert testimony commenting on what's in the 23 record on the other. So the rebuttal is -- it's for the 24 25 introduction of evidence rather than the introduction

1 of argument, is the point I'm trying to get at.

2	And so I'm trying to figure out is there
3	anything in the rebuttal testimony that you would point
4	to as, "This is expertise, this is expert evidence that
5	I'm introducing," rather than argument, rather than
б	summarizing evidence that's already in the record?
7	Because the main point here is that, if it's
8	just summary, the Hearing Officer's prior rulings have
9	said that summary really is best reserved for when the
10	parties are summarizing their take on the evidence in
11	their closing briefs. But there's certain points that
12	an expert, in interpreting evidence already in the
13	record, they could really only make in an opportunity
14	like this for presenting evidence into the record.
15	I hope I've clarified rather than muddled the
16	point, but I just wanted to make sure that was that
17	was our understanding of the Hearing Officer's prior
18	rulings.
19	MR. SIPTROTH: Thank you. Again, we're just
20	focused on that Section 11 and the Page 10 testimony?
21	That's what your question's based on; is that right?
22	MR. DEERINGER: Right. That's where I was
23	focused as well.
24	MR. SIPTROTH: Yeah. So I think Dr. Denton is
25	within his expertise to rebut testimony of witnesses

1 presented in Part 2 of the hearing to opine on the 2 modeling data and -- within the operational criteria 3 and within the adaptive management range and to point 4 out the absence of data in the petitioners' case in 5 chief. б CO-HEARING OFFICER DODUC: But beyond that, is what he's providing additional evidence or argument of 7 8 existing evidence in the record? 9 MR. SIPTROTH: He is -- I'm not sure what you 10 mean by "additional evidence." He did not do any additional modeling, but he is rebutting the testimony 11 12 in evidence presented by the petitioners in Part 2. 13 CO-HEARING OFFICER DODUC: Dr. Denton? WITNESS DENTON: Yes, I would argue that there 14 15 is new evidence and even surprise new evidence in the 16 sense that, in Part 2, we had this new modeling run that wasn't available to us, as Deirdre Des Jardins 17 18 said, at the time we submitted our Part 2 testimony. 19 And so we then, basically, have go through and 20 look at everything to use our expert opinions as to 21 whether the analysis I did in -- earlier based on --22 was it Biological Assessment H3+, whether that still 23 applies, so to update the Board and the evidence based 24 on this new surprise modeling data. 25 So that's basically why at this point it's the

> California Reporting, LLC - (510) 224-4476 www.CaliforniaReporting.com

first time I can start dealing with the relationship between the new data, CWF H3+, and the old version which was -- in my testimony was BA H3+. And other people used H3 or H4. But we now have this new set of surprise data that we then have to start focusing in on in our rebuttal.

CO-HEARING OFFICER DODUC: But didn't you just
make their point? Your rebuttal testimony goes back
and discusses B1 and B2 rather than CWF H3+.

10 WITNESS DENTON: No, I'm talking here about 11 this -- the discussion is more related to what they 12 disclosed or didn't disclose to -- on Page 31, it's 13 related to CWF H3+, not to Boundary 1 and Boundary 2.

But I think now that we have new data in front of us, we have CWF H3+ in front of us, we need to look at that and say, "Is that it? Is that what the project is?" Now, in terms of adaptive management and its effect on how the project operates, that is not the project necessarily.

20 CO-HEARING OFFICER DODUC: You may speak if 21 you have something helpful to add, Ms. Meserve.

MS. MESERVE: Well, I would just say that, to add to the discussion, that Dr. Denton is clearly an expert in modeling, and I think, you know, it's important not to gut out the context for the later

1 opinions that he provides.

2	And for him to, you know, review in a couple
3	paragraphs sort of how we got to here I don't think is
4	improper rebuttal as long as it's responsive to the
5	DWR's case in chief. And I believe that's what these
б	paragraphs are doing and should be allowed to review.
7	And just like we talked about earlier in the
8	day with Dr. Michael, you know, about his discussion of
9	what he observed was in the EIR with respect to his
10	view as an economic expert, for him to be able to point
11	out what was and wasn't there was important information
12	that an expert such as him could provide. And then I
13	think this is quite similar to that situation.
14	CO-HEARING OFFICER DODUC: Mr. Bezerra, again,
15	is it going to be something helpful?
16	MR. BEZERRA: That's my hope.
17	I think this is a pretty simple point. The
18	petitioners have presented a variety of model runs.
19	They've presented them beginning on November 30th, 2017
20	when they filed Part 2 evidence as this range.
21	And then they've said, "Oh, well, we've gotten
22	narrower and narrower within the range, and eventually
23	we ended up with CWF H3+."
24	They're still asking for you to approve the
25	petition within the entire range between Boundary 1 and

1 Boundary 2. And this is the first opportunity

Dr. Denton would have had to talk to you about whether 2 3 or not CWF H3+ was actually within that range or not. 4 We couldn't have done anything; none of us protestants 5 could have done anything about that before they б submitted --

7 CO-HEARING OFFICER DODUC: Mr. Bezerra, I understand that. My -- it's been a while, but my --8 9 Dr. Denton, are you -- help us understanding. 10 Now, we're actually going back to -- I guess it was -- what line? What page number it is now? 11 12 It's -- we're no longer discussing, I believe, Page 32. 13 We're back to your first set of motions. WITNESS DENTON: Page 10. 14 15 CO-HEARING OFFICER DODUC: Yes, the discussion 16 about Boundary 1 and Boundary 2. I agree with Mr. Bezerra. If your analysis is 17 18 of -- or your rebuttal testimony is of CWF H3+, then 19 that would be appropriate rebuttal testimony. My

understanding was that you were discussing Boundary 1 20 21 and Boundary 2.

22

Dr. Denton?

WITNESS DENTON: Part of my -- the point of my 23 24 rebuttal testimony is just so that you aren't left with 25 the impression that you're just going to be permitting

1 CWF H3+. There is this range. To go down to

2 Boundary 1 could get worse.

And we even heard from Mr. Berliner today that it almost implied that the fishery agencies could change the project even further outside of your purview.

7 So we need to be aware of what could happen 8 when this project comes online, that it's not 9 necessarily going to operate as CWF H3+. It could 10 operate something like Boundary 1.

11 CO-HEARING OFFICER DODUC: Does your rebuttal 12 testimony include an analysis of CWF H3+?

WITNESS DENTON: Yes. There's lots of graphs where I've got comparisons, side-by-side comparisons of bar graphs, so -- what CWF H3+ does. And then I say "but if they did operate to Boundary 1, it could be a lot worse."

18 CO-HEARING OFFICER DODUC: All right. Same 19 caveat; is this going to be helpful?

MS. DES JARDINS: This is very brief, and I just wanted to say that, to the extent petitioners have presented sort of an opinion on cumulative analysis of the set of modeling scenarios including CWF H3+, it's appropriate also for -- for protestants to be able on rebuttal to say this is our opinion about a cumulative

> California Reporting, LLC - (510) 224-4476 www.CaliforniaReporting.com

1 set of operational scenarios including CWF H3+.

2	And Dr. Denton's testimony, I believe, is
3	mostly focused on CWF H3+, but he does try to present
4	some of these I think you need to find a way to make
5	sure that he gets an opportunity to present these
6	cumulative opinions on the whole on the whole set,
7	including H3+. Thank you.
8	CO-HEARING OFFICER DODUC: Ms.Morris.
9	MS. MORRIS: I will be brief. Again
10	CO-HEARING OFFICER DODUC: And helpful?
11	MS. MORRIS: Yes, I always try to be helpful.
12	The issue is that they're talking about
13	Boundary 1 and water quality and harm to legal users of
14	water. That was Part 1.
15	There has been a lot of discussion about why
16	it should be allowed as comparison. They could
17	compare they could say H3+ and they already have
18	their evidence in about Boundary 1, but they did not do
19	that.
20	And again, if you look specifically at the
21	sections that Mr. Berliner cited, it talks about it
22	could cause significant water quality impacts in the
23	Delta and to legal users of water.
24	CO-HEARING OFFICER DODUC: All right. We're
25	taking a break.

1 MR. SIPTROTH: Could I just add one point? 2 CO-HEARING OFFICER DODUC: No, because if you 3 add, then Ms. Meserve will want to add. So we're 4 taking a break now. 5 (Recess taken) б CO-HEARING OFFICER DODUC: All right. We are 7 back in session. 8 With respect to the motions made by DWR and 9 State Water Contractors, the motion -- the first motion 10 has to do with the Boundary 1 and Boundary 2 analysis in Dr. Denton's rebuttal testimony and striking that. 11 12 That motion is denied. We find that 13 Dr. Denton's analysis is responsive to Ms. Buchholz's testimony, specifically DWR-1010, Page 9, on Lines 15 14 15 through 17 -- actually, Lines 12 through 17. 16 The testimony states that, due to adaptive 17 management, the CWF H3 operation could be refined in 18 the future, and any outcome is anticipated to be within 19 the range of alternatives analyzed within Boundary 1 20 and Boundary 2. 21 While Dr. Denton did not specifically point to 22 this page and this citation in Ms. Buchholz's 23 testimony, it is still, nonetheless, responsive. 24 The second motion is respect to striking his 25 opinion on his testimony. I believe it's CCC-SC-51,

> California Reporting, LLC - (510) 224-4476 www.CaliforniaReporting.com

starting on Line 3 of Page 31, through Line 14 of Page
 34 -- I'm sorry -- 32.

3 We also deny that motion. We find that that 4 is proper rebuttal testimony as it is his expert 5 opinion, offering his opinion based on his area of б expertise, the information that he believes is 7 necessary for our determination of flow criteria. 8 So with that, both motions are denied. 9 MS. MORRIS: Thank you. Does that mean that 10 with respect to the motions to strike the testimony of the DWR witnesses, that if we were to point to similar, 11 12 that those -- and the responses that we would have a 13 similar ruling? Because essentially, the fact that --14 they're stating --15 CO-HEARING OFFICER DODUC: I am not prepared 16 to discuss those motions at this time. 17 All right. Mr. Siptroth, if you would. 18 DR. RICHARD DENTON, 19 called as a Part 2 Rebuttal witness on behalf of Contra Costa County, 20 21 Contra Costa County Water Agency, 22 and Solano County, having been previously duly sworn, was examined 23 and testified further as hereinafter 24 25 set forth:

1	DIRECT EXAMINATION BY MR. SIPTROTH
2	MR. SIPTROTH: Yes. Good afternoon. Thank
3	you. My name is Stephen Siptroth, Deputy County
4	Counsel for Contra Costa County, Contra Costa County
5	Water Agency, and also here on behalf of Solano County.
б	I'm here with Dr. Richard Denton, who will present
7	rebuttal testimony on behalf of the Group 25
8	protestants.
9	Dr. Denton, have you been sworn in in this
10	proceeding?
11	WITNESS DENTON: Yes, I have.
12	MR. SIPTROTH: Has your statement of
13	qualifications previously been submitted into evidence
14	as CCC-SC-2?
15	WITNESS DENTON: Yes, it has.
16	MR. SIPTROTH: Is Exhibit CCC-SC-50 a true and
17	correct copy of the PowerPoint presentation you'll use
18	today to summarize your Part 2 rebuttal testimony?
19	WITNESS DENTON: Yes, it is.
20	MR. SIPTROTH: Is CCC Exhibit CCC-SC-51 a
21	true and correct copy of your Part 2 rebuttal
22	testimony?
23	WITNESS DENTON: Yes, it is.
24	MR. SIPTROTH: Are Exhibits CCC-SC-52 through
25	-67 true and correct copies of those exhibits?

1 WITNESS DENTON: Yes, they are. 2 MR. SIPTROTH: And you've prepared an errata 3 exhibit, Exhibit 56-Errata; is that correct? 4 WITNESS DENTON: Yes, I have. 5 MR. SIPTROTH: And you've provided that to б Mr. Hunt? 7 WITNESS DENTON: Yes, to Mr. Hunt. 8 MR. SIPTROTH: Can you describe the changes 9 that were made to Exhibit 56? 10 WITNESS DENTON: Yes. It was Exhibit 56, Figure 2. In the figure description, I had some 11 12 language referring to that the data was 16-year 13 averages. That was a mistake. The data actually -that were plotted were actually monthly average data 14 15 points for the entire 82-year period; October 1, 1921, 16 through September 30, 2003. So in my previous figure, it was presenting 17 18 water quality data, so 16 years was appropriate. But 19 in this one, it's presenting flow data, and so that was individual monthly data for the entire 82 years. So 20 21 the underlined portion is the sentence that is changed. 22 So it hasn't changed any of my conclusions. It's just 23 a tidy-up. 24 MR. SIPTROTH: And is CCC-SC-56-Errata a true 25 and correct copy of that exhibit?

1 WITNESS DENTON: Yes, it is. 2 MR. SIPTROTH: Thank you, Dr. Denton. 3 With that, I'll turn it over to you Hearing 4 Officers. I believe we requested 20 minutes for Dr. Denton's rebuttal testimony. I think the clock was 5 only set for 15, but we may ask for some additional б 7 time. Thank you. 8 CO-HEARING OFFICER DODUC: Go ahead. Start. 9 WITNESS DENTON: Hearing Officers Doduc and --10 CO-HEARING OFFICER DODUC: Go ahead. 11 WITNESS DENTON: -- Members of the Board, my name is Richard Denton. I'm a water resources 12 13 consultant. And I just want to note one other errata that 14 15 is on Page 14 of my written testimony. On Line 8 there 16 was a sentence that said that, "...there are significant adverse water quality impacts in CWF H3+ 17 18 that were" -- and I should have had "not" -- "were not 19 in the modeling for previous versions of the WaterFix 20 project." So that's a very important mistake on my 21 part. But the entire testimony is arguing that there 22 are these differences that were not in the previous 23 versions. 24 So it doesn't really change the rest of my testimony, but it does, obviously, change that 25

1 sentence. So I'd ask that that be accepted as well. 2 Okay. If I could have my PowerPoint, please. 3 So that's CCC-SC-50. Thank you. And if could 4 go to Slide No. 1. Thank you very much. 5 So today I will be providing rebuttal on the modeling data, CWF H3+, and discussing how that fits б 7 into the proposal by the petitioners. 8 My original testimony was based on Biological 9 Assessment H3+ which was prepared for the draft 10 Biological Assessment and the publicly released Final EIR. So I need to refer to -- or update the Board on 11 12 what it means now that we have this new model, modeling 13 data. Next slide, please. 14 15 The one aspect of the issue -- one issue that 16 we need to address is that whether this particular 17 modeling study is representative of the current version 18 of the WaterFix project. And I know that you've heard 19 a lot of testimony on this already, including by 20 Dr. Michael this morning. 21 If Metropolitan is intending to pay 65 percent 22 of the total cost of the project, then obviously, they 23 would expect to get a lot more water out of the project 24 than is currently modeled in the CVP share.

25 I understand there's been discussions about

floating, that the model is -- basically, you put
 conditions on the model, and then it floats and gives
 you a particular share.

I would note that, in my testimony on Page 7 of my written testimony on Line 4, I do note -- make note of the fact that, when the petitioners prepared some modeling for a single tunnel alternative, they actually kept the amount of water that the CVP could take through that single tunnel.

10 And seems to me there needs to be a modeling study that does actually cap the CVP use of that tunnel 11 12 if the CVP is getting a very low -- or paying a very 13 low percentage of the cost of that tunnel. Either that, or if the petitioners want to proceed with this 14 15 particular CWF H3+ as their project, then perhaps the 16 State Board would need to cap the State Water Project's use of the tunnels to be consistent with CWF H3+. 17

And then another difference is -- and this has already been discussed a lot already, I think -- that the Rio Vista mistake in the modeling, that was left in the modeling, January through August. So maybe I'll just skip that.

If you can go to the next slide, please.
I think it is important to determine where
this water is coming from and whose cut of the water is

California Reporting, LLC - (510) 224-4476 www.CaliforniaReporting.com

that's going through the tunnels. We're going to have water coming out of Oroville, more water being released out of Oroville during low flow periods to divert for export through the tunnels than coming out of the CVP reservoirs if that water is going primarily to the State Water Project.

7 And that we'll probably make changes to -- I 8 haven't got it on my plot here, but it will make 9 changes to what's going on in San Luis Reservoir, that 10 there will be constraint there as well as to the CVP 11 share and the State Water Project share.

12 And then we learned today that -- which I 13 hadn't realized, but it seems like this may actually have a negative effect on the CVP in terms of how much 14 15 water they receive. I was thinking myself that it 16 would just be a wash, that they wouldn't get any benefit out of it. But in this case it seems, from 17 18 Dr. Michael's testimony, that they may get. 19 If I can go to the next slide, please. CO-HEARING OFFICER DODUC: Is there a --20 21 Mr. -- Dr. Denton, that last statement you threw in

22 there, is that included in your written rebuttal 23 testimony?

24 WITNESS DENTON: No, not in my written, no. I
25 thought I was building on something you heard this

1 morning.

2	CO-HEARING OFFICER DODUC: Unfortunately, you
3	can't do that because that would be new and surprise
4	testimony. So that last sentence that you just added
5	on as a result of today's testimony is stricken.
б	WITNESS DENTON: With respect to the Rio Vista
7	minimum flows, I'd just like to note that, in
8	inspecting the data to see how often that 3,000
9	requirement governed, it turned out it was just four
10	months.
11	But I also noticed that, in September and
12	October of 1934, the project failed to meet D1641
13	requirements. And that may be just a quirk in the
14	model, but it is something that's there and has been in
15	the modeling in the No Action case as well.
16	Next, please.
17	So this one is really just saying that there
18	are those issues, but there's also the issue of how is
19	the project going to operate. Is it going to end up in
20	a situation of Boundary 1 where there is actually no
21	Fall X2 and no additional spring outflows?
22	Next slide, please.
23	And the purpose of this graph is just to show
24	a comparison of Boundary 1 outflows compared to the
25	proposed model or the adopted model, CWF H3+.

1 And you can see where the arrows are pointing 2 down three months in the fall, where there's a 3 significant drop in the outflow in the case of Boundary 4 1. So if the fishery agencies permit the petitioners 5 to operate to Boundary 1, then we're going to get these 6 very low-outflow scenarios.

7 And in the -- my figure, the one that -- is it 8 CCW -- CCC-SC-56, Figure 2, there's actually examples 9 there where in -- well, that Boundary 1 would actually 10 take outflows that were 20,000 cfs in the No Action 11 case and drop them down to the bare minimum of 12 3,000 cfs. So this would be a drastic change if they 13 were allowed to operate to that.

14 Next slide, please.

15 This slide I had previously in my testimony 16 just by way of pointing out where Bacon Island is, in the center of the picture there, because I'll be 17 18 discussing some impacts on water quality at Bacon 19 Island. And also note that Emmaton is shown there also in the Western Delta, and that's a location where the 20 21 petitioners have acknowledged that there are now water 22 quality impacts that need to be mitigated at the 23 Emmaton location.

24 Next slide, please.

25 So this slide is no longer a slide showing

Delta outflows but showing the effect of reducing Delta 1 outflows. And you can see this, with all the arrows 2 pointing, that there is significant increases in 3 4 salinity in the interior Delta, in this case, at Old River at Bacon Island. If the water -- the flows were 5 to reduce down in the fall to these very low values, б you'd get very high increases in Bacon Island. 7 8 And that slide also shows by comparison the 9 salinities at Bacon Island for H3+. And then you can 10 see there's degradation there occurring in October, November, and also in March, April, some of the other 11 12 months, as a result of this particular project. 13 Next slide, please. I wanted to also talk about the export/inflow 14 15 ratio. The petitioners in their evidence in Part 2, 16 for instance, in DWR-1143, there's footnotes talking about how -- or there's evidence in there about how the 17 18 export/inflow ratio has been redesigned. 19 I went back and looked at the original objectives, biological objectives for the E/I ratio 20 21 when it was being developed by the Ag-Urban Group or 22 the Joint Water Users as they were called back then. And it was to reduce fish, eqq, and larvae entrainment 23

25 So if we're talking about the export/inflow

and mortality at the export pumps.

24

ratio, even though back then in 1994 we didn't have a 1 North Delta intakes and we still don't have North Delta 2 3 intakes, when they come online, we still need to include them in the E/I ratio to make sure that there 4 5 isn't entrainment of the eggs and larvae. б And Mr. Greenwood -- Dr. Greenwood, the 7 fishery expert for the petitioners, I cite several 8 references in my testimony where he said that there 9 were key fish species upstream of the intakes and that 10 they would be susceptible to entrainment of their eggs and larvae. 11 12 Next slide, please. 13 This is just for your future reference, a 14 discussion or an excerpt from that biological 15 explanation. 16 Next, please. So in terms of the operating criteria for 17 18 CWF H3+, it is very different than the -- in three 19 cases here from the operating criteria for H3 and H4. I will note in Mr. Reyes' testimony that he 20 21 referred only to two -- two particular changes. And I 22 think what he was doing there is conflating a little 23 bit. He stated that there was going to be changes in 24 the spring outflow and that there would be changes in 25 October and November.

1 And the reason he did that -- he didn't make a 2 mistake, but to establish the outflows in April and 3 May, they put these stringent restrictions on the San 4 Joaquin inflow to South Delta exports ratio as well as 5 having a special term for -- special table for 6 determining the large outflow.

7 So when you just talk about the spring 8 outflows, then you could combine 1 and 3 perhaps, but I 9 thought it was important to break them out into three 10 separate conditions that are different.

Next slide, please.

11

In terms of Delta outflow, the real change really is just in October. Even though they've removed the minus 5,000 limit on the OMR in November, it didn't really change the outflows very much, but it did change it in October. So if you reduce outflows in October, then you're likely to get more seawater intrusion.

18 While that graph is there, I'd just make the 19 point that we are talking about improved spring outflows. That has been testified to by the 20 21 petitioners. And you can see that there is an 22 improvement in spring outflow in March with CWF H3+ 23 relative to the No Action Alternative, but in April and 24 May, there isn't any improvement or very -- in fact, a 25 slight decrease in outflow. So we have to be careful

talking about enhanced or improved if they're less than
 the No Action Alternative.

3 Next slide, please.

4 Part of my testimony in Part 2 was to say that 5 some of the presentations are masking the effects of the project or not necessarily showing all that's going б 7 on. I wanted to present this one from DWR-1069, 8 Figure 51. And it's showing the relative -- or the 9 deliveries South of the Delta to the CVP and State 10 Water Project contractors ordered by water year. And it does actually prove what the 11 petitioners were saying, that CWF H3+ in this 12 13 particular graph is within the range of H3 and H4. But in terms of the impacts on the Delta environment, 14 15 what's more important to the Board and to others is the 16 exports from the Delta, the timing of the exports and 17 the flows resulting from those exports.

So what should have really been presented or would be more useful to the Board would be a plot of Delta exports instead of Delta deliveries because the deliveries are modified by releases from previously stored water in San Luis and in the terminal reservoirs.

So if you go to the next slide, please.
So this slide is not -- it's of total south of

1 Delta exports. It's not plotted against -- as

2 functional water year type, but by month.

3 And you can see there's some real defenses where CWF H3+ is well outside the range of H3 and H4 in 4 5 terms of exports. For instance, in October the exports are much higher than it would be for H3 and H4. And б 7 because of the April-May restriction that was added 8 since H3, H4 in April and May, then we've ended up with 9 the exports being much less than the range of H3 and 10 Н4. So I think it is important to look at the 11 12 danger in different ways. There are ways of masking 13 results or impacts and other ways of exposing impacts. So hopefully that is showing you that there are not 14 15 only differences in the operating criteria but differences in the impacts of those changes in 16 operating criteria. 17 18 Next, please. 19 This just summarizes what I described there, that -- the various changes in Delta outflow and total 20 21 exports as a result of those three changes in operating 22 criteria. 23 Next, please. 24 In terms of salinities, there's a huge impact 25 in terms of water quality impacts that has been

1 introduced since Part 1, that in Part 1 we discussed H3
2 and H4, and there were at that time not a lot of water
3 quality impacts mainly because of testimony that I
4 gave, but saying that the outflows in October, November
5 were artificially high.

б And this graph basically proves that correct, 7 that, when you take away those artificially high outflows in October and November, then you end up with 8 much higher impacts. And you can see that the red bars 9 10 are degradation, and the bars for representing H3 and H4, the yellow and cyan bars, show that there would be 11 a benefit. But in fact, with the new version of the 12 project, there's degradation in October and November, 13 14 and even in March.

15 March is interesting. If you're thinking in 16 terms of March is supposed to be a month in which you 17 have enhanced Delta outflow, normally that should 18 translate into better water quality, but in this 19 particular case, the model says no.

20 Next slide, please.

21 So my first three points on this one is just 22 to say that yes, there are these differences in water 23 quality as a result of us going to the CWF H3+ project. 24 And I do -- I just want to highlight a concern 25 that, when there is discussion in the exhibits that

were provided in Part 2 regarding changes since the
 publicly released Final EIR, they basically skip
 discussion of these significant adverse water quality
 impacts.

5 There's discussion about, "oh, well, the water 6 quality is similar to H3 and H4, and if it's not 7 similar to H3, H4, it's similar to No Action 8 Alternative." And that's implying that there's no 9 degradation as a result of moving to this new version 10 of the project.

And I also have a concern that the only mitigation offered in this particular case is water quality or -- Mitigation Measure Water Quality 11 or 14 11E in particular, where they really just talk about --15 I want to -- so I can quote it correctly.

16 They say that they will "implement real-time 17 operations, including adaptively managing diversions of 18 the North and South Delta intakes to reduce or 19 eliminate water quality degradation in the Western 20 Delta."

And that's not specific enough. Those large water quality impacts that I showed you in the previous slides -- and just so say that they're going to try and do some -- "we're going to solve this by doing real-time operations," there's no particular goals

given there. There will be times when there's not a 1 State Board standard that's governing, but there will 2 3 be a water quality degradation, and that needs to somehow be addressed. 4 5 Next slide, please. б This is a graph that I presented in my 7 testimony in Part 2 direct. I just updated it for the 8 new modeling run and saying that, again, there is the 9 same problems. There is exceedance or increases in 10 exports in dry periods when Delta outflow is low. Next slide, please. 11 And in Part 2, DWR did specify that their 12 13 project does reduce water exports in dry years. And the previous slide, or Slide 18, really says that that 14 15 is not correct in many cases and that there really 16 needs to be some kind of permit term that ties the 17 project to reducing exports in drier periods. 18 Next slide, please. 19 And if we can go to the next one, I'll just describe it briefly. 20 21 I just updated this one as well because there 22 had been these changes. My point in this slide is that 23 the data points, daily water quality in the vicinity of 24 the Rock Slough standard -- and you can see that the 25 data points are well in excess of the 250 chloride

1 standard that applies at that station.

2	And so those data and the modeling run that
3	underlies it are kind of meaningless in terms of the
4	Board making a meaningful decision if you're not
5	anywhere near meeting the water quality standards on a
6	daily basis.

7 Next slide, please. Go to the next one.8 Thank you.

9 And again, I've updated this one for the new 10 data. And again, the State Board, in your Phase 2 proceedings, are looking to enhance flows, inflows to 11 the Delta or at least specify flows to the Delta so 12 13 there is some kind of requirement to meet a minimum flow at Freeport. And this project, in a number of 14 15 months, is decreasing flows coming into the Delta at 16 Freeport.

17

Next slide, please.

Yeah, so maybe just look at No. 5 here, that 18 19 the spring outflows -- there's testimony saying that that increased spring outflow is going to come from 20 21 willing sellers, but there's no contracts or funding 22 sources identified to show that there are going to be those willing sellers. So is the project going to make 23 24 up that water to get that enhanced spring outflow, or 25 is it not going to be met?

1 Next slide, please.

2	This one is just showing the five permit terms
3	that we are suggesting or the principles for developing
4	permit terms. The last one, I've added an extra one
5	related to adaptive management. If it is going to be
б	the decision of the fishery agencies to change the
7	project to allow it to operate differently than
8	CWF H3+, then we would like to have the State Board to
9	put some sort of restrictions on that so that it
10	doesn't go as far as Boundary 1, doesn't reduce
11	outflows as far as eliminating the Fall X2.
12	After all, that's one of the terms that you
13	suggested in your 2010 Delta Flow Criteria Report. So
14	it would be nice to have a permit term that prevented
15	the water quality impacts of Boundary 1.
16	Next slide, please.
17	So there's just a summary of my conclusions
18	that CWF H3+ doesn't represent how the project is
19	likely to actually operate in the future. Despite what
20	was testified to, it's not with CWF H3+ is not
21	within the range of H3 or H4. And unless the modeling
22	does model the actual project, it's going to very hard
23	for you to make a properly informed decision.
24	And I just want to repeat again that this
25	project is not in the public interest because it

1 doesn't reduce exports during dry periods and it

2 doesn't have the capacity to capture more water in a 3 wet period.

4 Thank you very much.

5 CO-HEARING OFFICER DODUC: Thank you,6 Dr. Denton.

```
7 Mr. Bezerra.
```

8 MR. BEZERRA: Yes, I just have a housekeeping 9 thing. I reserved 30 minutes of cross. I think I only 10 have about 10. I'm doing my best to juggle the hearing with other matters. I have a 3:00 o'clock conference 11 12 call, so I'm guessing my turn might come up during my 13 conference call. So I just wanted to let you know that might be why I'm not here, when the call's -- but I'll 14 15 come right back as soon as I can.

16 CO-HEARING OFFICER DODUC: Unless Ms. -- why 17 don't you go now, Mr. Bezerra?

18 MR. BEZERRA: Okay. Thank you very much. I19 appreciate it.

20 CROSS-EXAMINATION BY MR. BEZERRA

21 MR. BEZERRA: Good afternoon, Dr. Denton. My 22 name is Ryan Bezerra. I'm an attorney for cities of 23 Folsom and Roseville and Sacramento Suburban Water 24 District, San Juan Water District.

25 And good afternoon to you, Mr. Siptroth. It's

1 good to see you.

2	MR. SIPTROTH: Likewise.
3	MR. BEZERRA: If we could please pull up
4	Dr. Denton's testimony, CCC-SC-51, and Page 6.
5	Dr. Denton, in this Section 3 of your
б	testimony, you generally talk about how the sharing of
7	export capacity is not defined and how that may affect
8	model accuracy of model results, correct?
9	WITNESS DENTON: Yes.
10	MR. BEZERRA: And these are some basic
11	questions because I'm sure you're aware of it.
12	But CalSim contains logic that reflects
13	regulatory requirements that have to be met, correct?
14	WITNESS DENTON: Yes.
15	MR. BEZERRA: And other aspects of the model
16	then reflect logic to attempt to reflect operational
17	discretion, correct?
18	WITNESS DENTON: Yes.
19	MR. BEZERRA: So, like, San Luis Rule Curve
20	reflects attempts to reflect operational discretion
21	to move water north to south, correct?
22	WITNESS DENTON: Chosen by the project
23	operators, yes.
24	MR. BEZERRA: So in your opinion, if the
25	sharing of capacity in WaterFix is different than

what's assumed in the model, would that potentially
result in a departure from the discretionary logic in
the model?

4 MS. MORRIS: Objection. Outside the scope of this witness's testimony. He did not go into the model 5 logic or the divisions. He just said it isn't as it б 7 was modeled based on a financial allegation, not on 8 anything other than Met agreed to pay for 33 percent of 9 the -- which is the CVP portion. And that is the only 10 basis of his testimony; nothing to do with modeling 11 logic.

12 CO-HEARING OFFICER DODUC: Mr. Bezerra. 13 MR. BEZERRA: Yeah. If we could take a look 14 at Page 7 of his testimony, Lines 17 to 24, he's 15 describing how changes in the use of capacity in 16 WaterFix might mean the modeling's not very useful, and 17 I'm attempting to unpack why that is.

18 CO-HEARING OFFICER DODUC: And your question 19 was?

20 MR. BEZERRA: That if the sharing of capacity 21 in WaterFix is different than what's in the model, that 22 would reflect changes in operational discretion that 23 are not reflected in discretionary logic for the model, 24 correct?

25 MS. MORRIS: And that's my objection --

1 CO-HEARING OFFICER DODUC: I'm having --2 perhaps it's late in the day. MR. BEZERRA: Yeah. 3 CO-HEARING OFFICER DODUC: My coffee is 4 5 coming, Mr. Bezerra. б MR. BEZERRA: Yeah. 7 CO-HEARING OFFICER DODUC: But I'm not following your question. 8 9 MR. BEZERRA: Sure. So there's two components 10 to the model. 11 CO-HEARING OFFICER DODUC: Yes. 12 MR. BEZERRA: There's the logic that reflects 13 regulatory requirements, and there's the logic that attempts to reflect operational discretion. And I'm 14 15 just --16 CO-HEARING OFFICER DODUC: But that can never truly reflect operational discretion? 17 18 MR. BEZERRA: Correct. And all I'm I trying 19 to do is explore Dr. Denton's opinion as to, if you changed capacity use in the project, how different 20 21 would that be than the discretionary logic that's in 22 the model? 23 CO-HEARING OFFICER DODUC: Do you consider, 24 Dr. Denton, the capacity for which you are familiar 25 with and discuss in your testimony, in your opinion is

> California Reporting, LLC - (510) 224-4476 www.CaliforniaReporting.com

151

1 that a discretionary aspect of the modeling?

2 WITNESS DENTON: I'm not sure that's the 3 question he asked, though, because --4 CO-HEARING OFFICER DODUC: I'm trying to make 5 a linkage here between -б WITNESS DENTON: I thought he was sort of 7 saying something about would you have to change the 8 rule curves in the reservoirs to compensate, or maybe 9 that would have to change because of. . . 10 CO-HEARING OFFICER DODUC: Is that what he asked? 11 12 MR. BEZERRA: That's what I'm trying to get 13 to, yes. MS. MORRIS: And I think that demonstrates how 14 15 far outside the scope of this rebuttal testimony 16 Mr. Bezerra is going, to move -- I'll stop there. 17 CO-HEARING OFFICER DODUC: Mr. Aladjem? 18 MR. ALADJEM. Madam Chair, Dr. Denton 19 specifically put Mr. Bezerra's question. And what I believe Mr. Bezerra is trying to do is to understand 20 21 the paragraph from Lines 17 to 24 and see if that is 22 the basis for Dr. Denton's opinion. CO-HEARING OFFICER DODUC: All right. 23 Overruled, Ms. Morris. 24 25 Especially now that Dr. Denton explained your

1 question to me, Mr. Bezerra.

2 MR. BEZERRA: Yes. Some day I'll get my 3 degree in CalSim reading. So. . .

4 CO-HEARING OFFICER DODUC: Dr. Denton, answer 5 the question you just phrased and not Mr. Bezerra.

6 WITNESS DENTON: What I will say is that DWR, 7 if they intend to use the tunnels primarily for their 8 own diversions, would then have to change things like 9 the rule curves on Oroville to take into account that 10 there would be more demand on Oroville to meet an 11 increased demand going through the tunnels.

So there would need to be changes. But I'm not an expert on setting rule curves, but I just realized that they would need to be changed.

MR. BEZERRA: But -- so, for instance, the San Luis Rule Curves that are in the model, the CWF H3+ model, would have to be different if you changed the use of capacity in the tunnels, correct?

19 WITNESS DENTON: I would -- yes, I would 20 imagine so. And I was thinking about that earlier, 21 that you would end up having a situation where the 22 State Water Project would be borrowing some of the 23 CVP's share of San Luis more often.

24 MR. BEZERRA: And similarly the --25 CO-HEARING OFFICER DODUC: Hold on.

1 MR. BEZERRA: Similarly the export 2 estimates --3 CO-HEARING OFFICER DODUC: Hold on, 4 Mr. Bezerra. Ms. Morris is desperate to get to the 5 microphone. б MS. MORRIS: I would just move to strike the 7 very last portion about borrowing from San Luis 8 Reservoir. That was not in direct response to the 9 question, and it was an add-on. And I would move to strike it as non-responsive to the question. 10 CO-HEARING OFFICER DODUC: Mr. Bezerra, what 11 12 was your question again? 13 MR. BEZERRA: My specific question was would a different allocation of capacity in the tunnels force a 14 15 change in operations from what the rule curves assume 16 in the modeling? CO-HEARING OFFICER DODUC: And you answered 17 18 yes. And, yes, you did add on that statement. So 19 we'll strike that statement. MR. BEZERRA: Well, I can just ask the 20 21 question. 22 Would that also require a change in the 23 allocation of use in storage in San Luis Reservoir? 24 MS. MORRIS: Objection, beyond the scope. If 25 we're going to stick to the testimony, it's talking

about capacity of the tunnels not capacity at San Luis,
 nor is it really discussing operations other than to
 say that there may be impacts to the reservoirs and in
 the Delta, not South of Delta.

5 MR. BEZERRA: Again, we're talking about the 6 discretionary logic in the model, which I believe 7 includes sharing of capacity in San Luis Reservoir.

8 CO-HEARING OFFICER DODUC: Mr. Aladjem, did9 you wish to add something?

10 MR. ALADJEM: Yes, ma'am. Yes, Madam Chair. 11 If we direct the attention to the Lines 22 to 12 24 of Dr. Denton's testimony, he says "Releases of 13 stored water from Shasta and Folsom CVP reservoirs are 14 likely to be less than CWF H3 modeling."

15 That directly implicates the San Luis Rule 16 Curve because it indicates how much of the share of the 17 San Luis CVP will be using. I think Dr. Denton is 18 trying to explain that.

19 CO-HEARING OFFICER DODUC: All right. Let's20 let Dr. Denton explain.

21 WITNESS DENTON: Yes, I was just trying to do 22 that in the sense of a rule curve, that operations of 23 San Luis will change just as much as the other 24 operations will change.

25 But I think the main point I'm saying up

1 there, rather than have me explain to you what's going 2 on, we need to have that modeled properly using the 3 correct shares so that we do know and we answer Mr. Bezerra's questions as to what rule curves need to 4 5 be changed, how much extra draw-down there is, et б cetera. 7 MR. BEZERRA: And I think it's just one more question. 8 9 So similarly, the export estimate allocation 10 logic in the model would have to change to reflect the revised allocation of capacity in the tunnels as well, 11 12 correct? 13 WITNESS DENTON: Yes. MR. BEZERRA: Okay. Thank you very much. 14 15 That concludes my cross-examination. 16 CROSS-EXAMINATION BY MS. MORRIS MS. MORRIS: Good afternoon. Stefanie Morris 17 18 on behalf of the State Water Contractors. This is a 19 joint cross-examination with Department of Water 20 Resources. 21 Just -- can we scroll up to the top of this 22 page of your testimony, Page 7. Right there. Looking at Line 6, is the basis of your 23 24 statement relating to a change in the project and a 25 change in the CVP allocation -- is the only basis for

1 that statement, what you have here, Metropolitan's

2 Board vote?

3 WITNESS DENTON: Yeah, I guess so, that we 4 were saying that there has been this -- or was going to 5 be this decision remade, because they hadn't previously 6 voted on it, that they would pay a larger share. And, 7 therefore, based on the modeling that they had done for 8 the single tunnel, there was going to be a larger State 9 Water Project share of the tunnels.

10 MS. MORRIS: And how do you know there's going 11 to be a larger State Water Project share just because 12 Met is funding a larger portion of the project? What 13 do you base that statement on?

WITNESS DENTON: I do have in my testimony --14 15 I think it's my last exhibit, 67, about that --16 MS. MORRIS: Why don't we pull that up, Mr. Hunt. 17 18 What page would you like to go to? 19 WITNESS DENTON: I just -- I'm not sure, actually. What does it say there? 20 21 Table 3. 22 MS. MORRIS: Can you go up, please, and go up 23 again? 24 WITNESS DENTON: Yes, one of those sort of 25 things.

1 MS. MORRIS: Right there. Okay.

2 WITNESS DENTON: Yeah.

3 MS. MORRIS: And can you tell me where on the 4 slide it shows that there's going to be a larger 5 portion of State Water Project allocation with a full б project, not with the State Water Project-only project, 7 which was a 6,000 facility, but with the full 9,000 8 facility? 9 Do you see that's the full 9,000 facility on 10 the slide you have attached? It's Item 8, Slide 11 of 11 your exhibit. 12 WITNESS DENTON: Right. MS. MORRIS: Do you understand that table 13 or chart on the left is a 9,000 cfs project and that 14 15 the one on the right is a 6,000 cfs project? Do you 16 understand that? 17 WITNESS DENTON: This particular --18 MS. DES JARDINS: I have an objection. I 19 would like the State Water Project Contractor attorney to not testify or not characterize evidence overly when 20 21 she's asking the question such that she's almost 22 providing the answer. Thank you. 23 MS. MORRIS: I'm not --24 CO-HEARING OFFICER DODUC: Overruled. 25 Ms. Morris, just continue.

1 MS. MORRIS: Okay. So you see that.

2 And then can you go -- could you go down to3 the last slide. Right there.

4 And do you see under Option 1, do you see any 5 option that provides for a 6,000 cfs project? б WITNESS DENTON: No. I'm talking only about 7 the proposed project, the 9,000-cfs capacity project, 8 but where State Water Project is paying primarily the 9 full cost. I'm not sure about the Santa Clara and 10 where they fit in with the -- being the CVP contract. MS. MORRIS: Right. But you understand this 11 12 is Metropolitan's Board action that you're relying on 13 to state that there will be more State Water Project with the CVP not participating? That's what you're 14 15 saying, correct? 16 WITNESS DENTON: Yeah, and --MS. MORRIS: Okay. 17 18 WITNESS DENTON: -- I'm reading it and using 19 common sense, saying that, if you're paying for the whole project, you'd probably be interested in 20 21 receiving all the water through --22 MS. MORRIS: But you have -- that's what your 23 understanding is, but you don't have any evidence of 24 that, do you? 25 WITNESS DENTON: Not at this stage. Haven't

1 seen anything.

2 MS. MORRIS: And then if we could go back up 3 to the bar chart, right there.

4 And this was attached as part of the staff 5 presentation for the Metropolitan action, was it not? б WITNESS DENTON: Yes. I just excerpted a few 7 pages to be helpful, to backup what I'm -- the fact 8 that I'm making the statement about the extent of 9 changes, I wanted to have that sort of evidence there 10 for people to review. MS. MORRIS: Okay. Thank you. 11 12 And can we go back now to your testimony, 13 Page -- I'm sorry -- CCC-SC-50, Slide -- I'm sorry. That's your presentation -- your Slide 23. I might 14 15 have just given you the wrong cite. I think that's 16 right. Yes. You've drawn a blue line through the data and 17 18 indicated that the blue line indicates no change in the 19 Delta inflow between the No Action Alternative and CWF H3+; is that correct? 20 WITNESS DENTON: Yes, because it's a -- it's 21 22 an X-Y plot, and so it's -- 25,000 No Action Alternative, then if it's 25,000 with the project, then 23 24 there's no change. 25 MS. MORRIS: So that's a "yes"?

1 WITNESS DENTON: That's a "yes." 2 MS. MORRIS: Okay. And your graphic shows a 3 greater number of years where inflows are higher under CWF H3+ than the No Action Alternative, correct? 4 WITNESS DENTON: Not necessarily. The only --5 б this is a very good way to explain data to somebody to 7 show changes. But you get a lot of the data points as 8 sitting on top of each other, so it doesn't necessarily 9 mean because there's more circles that you can see -we don't know how many data points are overlapped. 10 MS. MORRIS: Okay. I can understand that. 11 But I guess using my common sense, if I look above the 12 13 blue line, there are a lot more dots, even if they're sitting on top of each other, than under the blue line. 14 15 Would you agree with that? 16 WITNESS DENTON: I would agree with that, 17 yeah. 18 MS. MORRIS: Okay. And your dashed red line 19 on this chart represents a 30 percent decrease in inflows between the No Action Alternative and CWF H3+, 20 21 correct? 22 WITNESS DENTON: Yes. MS. MORRIS: Isn't it true that a reduction in 23 24 inflows of this magnitude only occurs at inflows above 25 12,000 cfs, according to your graphic?

1 WITNESS DENTON: Yes.

2 MS. MORRIS: Roughly?

3 WITNESS DENTON: Roughly. There's a couple there are almost 30 percent down by 10,000 there. 4 5 MS. MORRIS: Are you aware that 12,000 cfs б inflow is 25 percent higher inflow than the maximum 7 required Delta outflow in July of wet and above-normal 8 years under D1641? 9 WITNESS DENTON: Yeah, but it's not a -- it's 10 an oranges-and-apples comparison to compare inflow in Sacramento with Delta outflow because there's a lot 11 12 happens between those two locations, including exports, 13 including evaporations, et cetera. So just because it's -- the outflow is a 14 15 certain requirement, you have to have more than that as 16 an inflow from the Sacramento. MS. MORRIS: Right. So if you have to have a 17 18 higher outflow out of the Delta and the requirements 19 for -- and strike that. My question was whether the inflow that is 20 21 required is 25 percent higher than the outflow. And 22 you just testified that the outflow would be higher 23 than the inflow because there would be additional water 24 uses between the inflow and the outflow to the Delta, 25 correct?

WITNESS DENTON: Yeah, the inflow needs to be 1 higher than the outflow, the required outflow. 2 3 MS. MORRIS: The red line --Let's go to Slide 18, please. 4 5 And the red line on this slide is intended to б represent the outflow conditions you believe are low 7 outflow, correct? 8 WITNESS DENTON: Yes. 9 MS. MORRIS: And you propose a flow condition 10 up to 10,000 cfs shown on the top right of the chart, 11 correct? 12 WITNESS DENTON: Correct. 13 MS. MORRIS: And yet in your case in chief, you claim that a Delta outflow of 5,000 cfs was a very 14 15 low outflow; is that correct? 16 WITNESS DENTON: Yes, that's the sort of outflow that you get in the fall when the Delta is most 17 18 vulnerable. 19 MS. MORRIS: And looking -- revisiting the D1641 outflow standards we talked about, isn't 20 21 10,000 cfs an outflow 20 percent higher flow than the 22 maximum required Delta outflows in July of wet and 23 above-normal water years? 24 WITNESS DENTON: Can you repeat the question? 25 MS. MORRIS: We talked about the D1641 outflow

1 standards.

2	WITNESS DENTON: Right.
3	MS. MORRIS: And isn't 10,000 cfs 20 percent
4	higher flow than the maximum required Delta outflows in
5	July of wet and above-normal water years?
б	WITNESS DENTON: I'm not sure. I haven't got
7	those numbers in front of me.
8	MS. MORRIS: Okay.
9	WITNESS DENTON: If I could just add that the
10	locating of that particular point is to sort of say,
11	well, when should they be able to go above existing
12	conditions? And I chose something around the 7100 cfs
13	which relates to having X2 at Collinsville.
14	It was just really a setting a line that
15	people could think about. And it's up to the Board's
16	discretion if they even choose it, but they could
17	choose a different line.
18	MS. MORRIS: Thank you, but that wasn't my
19	question. I'm more concerned not about your permission
20	or where you think a permissible would be, but looking
21	at what you consider to be the a low or dry or
22	low-outflow years.
23	If we could bring up State Water Resources
24	Control Board Exhibit 21. And I believe it's sorry.
25	I'll slow down. Apologies. I think it's PDF Page 190.

1 Wait, before you do that, Mr. Hunt.

2	Do you see this is the revised water rights
3	decision, D1641 commonly referred to?
4	WITNESS DENTON: Yes, I do.
5	MS. MORRIS: Could we go to PDF Page 196.
6	CO-HEARING OFFICER DODUC: Ms. Des Jardins.
7	MS. DES JARDINS: I just wanted to point out
8	that that exhibit is in the SWRCB exhibits. I believe
9	it's SWRCB-21.
10	CO-HEARING OFFICER DODUC: Yes, which she just
11	called up.
12	MS. MORRIS: I thought I must have the
13	wrong PDF page. Can you is that the PDF page
14	number? Can you yes, Table 3. I think it's Table
15	3. Thank you and Delta outflow.
16	And can I want to direct your attention to
17	the wet and above-normal and July. Do you see that
18	the it's 8,000?
19	WITNESS DENTON: Yes. And that's the minimum
20	that they that the Board thinks we need to have to
21	make the Delta
22	MS. MORRIS: Right. So you said you were
23	unsure about my question, but I'm going to go back and
24	ask, now that we've established what the minimum
25	outflow is under the standards.

1 Isn't it true that D1641 outflow standards --2 compared to D1641 outflow standards, the 10,000 cfs you 3 represent as a potential permit condition is 20 percent 4 higher flow than the maximum [sic] required Delta 5 outflows in wet and above-normal years? б WITNESS DENTON: I'd agree, yes. 7 MS. MORRIS: And looking on Slide 11 --8 CO-HEARING OFFICER DODUC: I'm sorry, 9 Ms. Morris, hold on. 10 MS. MORRIS: Yes. 11 CO-HEARING OFFICER DODUC: Could you repeat 12 your question? Because I see this is minimum not 13 maximum. MS. DES JARDINS: Yeah, I -- right. 14 15 MS. MORRIS: Right. And that was my question. 16 It's -- that's the minimum outflow, and he's proposing more than the minimum. He's proposing --17 18 CO-HEARING OFFICER DODUC: In your question to 19 him, you actually said "maximum." MS. MORRIS: Oh, I'm sorry. Thank you. 20 21 WITNESS DENTON: Thank you. 22 MS. MORRIS: Looking at Slide 11 of CCC-SC-50. 23 Did you watch the direct testimony of 24 Dr. Martin Greenwood in February during his initial 25 presentation of evidence for Part 2?

1 WITNESS DENTON: Yes, I did, but I'm not sure 2 I can recall a lot of it. I was interested in it, 3 yeah. 4 MS. MORRIS: Are you familiar with the 5 Developments After Publication document, which is б labeled as State Water Resources Control Board 108? 7 And just before you go there, because I'm sure we have 8 to --9 WITNESS DENTON: The ITP or --10 MS. MORRIS: One second. You're stating here on Slide 11 that CWF H3 is not within the range of 11 12 alternatives -- alternative for a Scenario H3 and H4. 13 Is that your opinion here? WITNESS DENTON: Yes. 14 MS. MORRIS: Okay. And can you, please, 15 16 Mr. Hunt, pull up State Water Resources Control Board 108 on Page 151, which is the Developments After 17 18 Publication of the Proposed EIR. And then can you go 19 down to the next page. Sorry. Yes, on Delta outflow. Do you see in Figure 26 that the Delta outflow 20 21 is about the same for the NAA, the BA, H3+, and the 22 CWF H3+, which is here denoted as Revised Alternative 4A? Are the lines, for the most part, pretty much on 23 24 top of each other? 25 WITNESS DENTON: Not really. In October in

critical years, there's a difference, and then in dry 1 2 years in February, March and April, there are 3 differences. 4 MS. MORRIS: Okay. Of what magnitude are 5 those differences? б WITNESS DENTON: I think the ones in 7 October -- or September, October, November are 8 important; that if you -- you already have a low 9 outflow, so you have a lot of seawater intrusion. If 10 you reduce it even more, you're going to get a lot. 11 It's very sensitive to changes when it's low. It may not be as important in February and March. 12 13 MS. MORRIS: I want to capture your answer, 14 and I think we are not creating a very clear record 15 here. 16 I think you were talking about in October of the critical years that the green line is slightly 17 18 higher than the blue and red line, which are on top of 19 each other; is that correct? WITNESS DENTON: As I can see it there. 20 21 Probably need to be blown up a little bit. 22 MS. MORRIS: And what percentage change in 23 that time period between the green and the red and the 24 blue lines would you estimate that is? 25 WITNESS DENTON: What percentage change?

1 MS. MORRIS: How much change is it? 2 WITNESS DENTON: I can't do it off the top of 3 my head, but I'm making the point that it's very 4 sensitive. You can just reduce by 500 cfs the outflow, 5 and you have a huge effect if it's a low-outflow 6 situation in the fall.

7 MS. MORRIS: But on this chart on the critical 8 years, would you agree that, besides the one section 9 you're saying is not similar, that after October the 10 lines pretty much are on top of each other?

11 WITNESS DENTON: I think that was, basically, 12 my own testimony when I put up one of my other slides 13 that I showed that the real change in outflow going 14 with those three changes only really changed the 15 outflow in October.

MS. MORRIS: So yes, you would agree that, except for October, the lines are pretty much on top of each other and they're similar?

19 WITNESS DENTON: I wouldn't say that the lines 20 are on top of each other. They don't look like that to 21 me.

22 MS. MORRIS: Okay. If we could go back to 23 your Exhibit CCC-SC-50, Slide 4, Item 1.

You say, "DWR has failed to provide the StateWater Resources Control Board with modeling that

represents the actual proposed project, (i.e., no 1 2 January-August Rio Vista minimum flows)"; is that 3 correct? 4 WITNESS DENTON: That is correct. 5 MS. MORRIS: And if we could bring up, б Mr. Hunt, please, DWR-1292. Thank you. 7 I'll give you a second to look at this. This 8 is -- I'll represent to you DWR performed a sensitivity 9 analysis showing CWF H3+ modeling results with and 10 without the January-August minimum Rio Vista flow modeling assumption which is shown here. 11 12 My question is --13 MS. DES JARDINS: I have an objection. CO-HEARING OFFICER DODUC: Could you let her 14 15 finish her question first. 16 MS. DES JARDINS: Thanks. CO-HEARING OFFICER DODUC: And let's wait to 17 18 see if Dr. Denton's own lawyer, Mr. Siptroth, has 19 anything to say. MS. DES JARDINS: Thank you. 20 21 MS. MORRIS: If we turn to Page 2; Page 2, 22 Figure 2. Doesn't this -- does this sensitivity analysis show that there's virtually no change in Delta 23 24 outflow when the January-August Rio Vista flow 25 requirement is removed from the model?

1

CO-HEARING OFFICER DODUC: Is there an

2 objection, Mr. Siptroth?

3 WITNESS DENTON: We're interested in this one. MR. SIPTROTH: I don't object to the question. 4 5 I think Dr. Denton can answer. б MS. DES JARDINS: I would like to say that 7 this is the analysis that the Board struck as beyond 8 the scope of Eric Reyes' testimony, and I object to it 9 being introduced on cross for the same reason. 10 CO-HEARING OFFICER DODUC: Actually, people are allowed to use whatever they want on cross. 11 12 So, objection overruled. WITNESS DENTON: Could we have a look at 13 Figure No. 1 again? You showed me that very briefly. 14 15 Didn't get a chance to look at it. 16 So that is showing -- the purple and the blue 17 bars are showing that they are pretty much the same, 18 though the one thing I would say about that is that, if 19 you look at dry and critical years --MS. MORRIS: I'm sorry. My question is not 20 21 about Figure 1. My question is about --22 WITNESS DENTON: You showed it to me earlier. MS. MORRIS: -- Figure 2. 23 24 No, I was establishing the foundation of the 25 document, and my question is on Figure 2.

1 WITNESS DENTON: Okay. So Figure 2 shows that 2 with or without the January through August Rio Vista 3 that, for example, in critical years Delta outflow 4 decreases with the project. 5 MS. MORRIS: So you're saying between the No Action Alternative of 5,187 compared to either H3+, б 7 which is 5087, or H3+ with no Rio Vista at 5086? 8 WITNESS DENTON: That is a significant --9 MS. MORRIS: My question is isn't the 10 sensitivity analysis showing that H3+ that has -- does have the Rio Vista and H3+ with no Rio Vista are 11 12 essentially the same in critical years? 13 WITNESS DENTON: Well, they're the same in 14 terms of long-term averages. MS. MORRIS: Thank you. 15 16 WITNESS DENTON: But remember, there were only 17 four months that were changed. And during those four 18 months, there will be effects. Or in those four 19 months --CO-HEARING OFFICER DODUC: Enough, please, 20 21 Dr. Denton. You've answered her question. 22 MS. MORRIS: Isn't it true that you requested 23 and DWR provided to you the results of this sensitivity 24 analysis? 25 WITNESS DENTON: Yes, they did.

1 MS. MORRIS: And then turning to --WITNESS DENTON: Can I just answer that that 2 3 was provided after the submission date for our testimony, so couldn't respond to it. 4 5 MS. MORRIS: Turning to CCC-SC-51, Page 8, you б state that there are only four months in the CWF H3+ 7 model that changed when the Rio Vista January and 8 August minimum flow assumption is removed, correct? 9 WITNESS DENTON: Correct. 10 MS. MORRIS: Isn't that four months out of a total of 984 months in the model run? 11 12 WITNESS DENTON: Yes, that's true. 13 MS. MORRIS: And recalling back to DWR-1292, Figure 2 that we just looked at, the sensitivity 14 15 analysis, those four months were shown to have little 16 to no effect on the modeling outflow results, correct? 17 WITNESS DENTON: That shows that the --18 MS. MORRIS: It shows --19 WITNESS DENTON: It shows all the pages, not just those four months. 20 MS. MORRIS: Right. It shows --21 22 WITNESS DENTON: It doesn't look at those four 23 months individually. 24 MS. MORRIS: But it does show that the change 25 goes from 5087 to 5086 in critical years?

1 WITNESS DENTON: Yeah, because as you said, 2 there's only four months out of the large number of 3 12 times 82 months that it occurs. So in an averaging 4 sense, you won't expect to see a change. 5 MS. MORRIS: And in dry years, it's exactly б the same; is that correct, 72, 78? 7 WITNESS DENTON: Right, but it's still less than the No Action Alternative because the project's 8 9 decreasing --10 MS. MORRIS: I move to strike the last portion 11 as being non-responsive. 12 CO-HEARING OFFICER DODUC: So moved. 13 Dr. Denton, just answer the question she asked. If there's any clarification that needs to be 14 15 made, your attorney might -- will do so, could do so in 16 redirect. MS. MORRIS: Looking at CCC-SC -- I'm sorry. 17 18 Yeah, Slide 4. Sorry, Mr. Hunt. I'm making you jump 19 around a lot. I apologize. 20 You state in Item --21 CO-HEARING OFFICER DODUC: There are only 22 three pages. MS. MORRIS: Well, it's 50 not 54. Slide 4. 23 24 There we go. 25 You state in Item 2 that CWF H3+ fails to

1 comply with the D1641 Rio Vista standard in September 2 and October, correct?

3 WITNESS DENTON: Correct. 4 MS. MORRIS: And in your testimony on 5 CCC-SC-51 at Page 8, you state that only two months in б the 984-month period -- simulation period, CWF H3 fails 7 to comply with the D1641 Rio Vista standard in 8 September and October of 1934, correct? 9 WITNESS DENTON: Correct. 10 MS. MORRIS: And you explained that both the NAA and CWA [sic] H3+ failed to meet the Rio Vista 11 12 standard in only those two months out of the 984-month 13 simulation, correct? 14 WITNESS DENTON: Correct. 15 MS. MORRIS: Are you aware that the NAA and 16 CWF H3 CalSim models assume early long-term climate change and sea level rise? 17 18 WITNESS DENTON: Early long-term, yes. 19 MS. MORRIS: Are you aware that September and October of 1934 represent the end of an extended 20 21 drought period? 22 WITNESS DENTON: Yes, I do. 23 MS. MORRIS: And the two months that you've 24 shown on the table testified to, those were the end of 25 the extended drought period, were they not?

WITNESS DENTON: Yes, they were affected by 1 2 that extended drought. 3 MS. MORRIS: And if we could look at CCC-SC-55. 4 Before we do that, Mr. Denton -- I'm sorry. I 5 б keep calling you Mr. Denton. Dr. Denton. I apologize. 7 Okay. Looking back at this slide, 55, 8 Exhibit 55, Figure 1, this figure shows the maximum 9 increase in salinity as 65 EC, correct? And we're 10 looking at March shows the maximum in the red bar; it's about 65 EC? 11 12 WITNESS DENTON: Yes. MS. MORRIS: Isn't it true that the 250 13 chloride objective is approximately 1,000 EC? 14 15 WITNESS DENTON: Yes. 16 MS. MORRIS: So the 65 EC is 6.5 percent of the 250 chloride standard, correct? 17 18 WITNESS DENTON: Yes. 19 MS. MORRIS: I don't have any further 20 questions. 21 CO-HEARING OFFICER DODUC: Thank you, 22 Ms. Morris. I think now would be a good time to take a 23 24 break because Mr. Aladjem's cross-examination is about 25 45 minutes. So let's return at --

1 Will 3:15 be okay, Debbie?

I was asking the court reporter, Mr. Aladjem.
All right. Break until 3:15.

4 (Recess taken)

5 CO-HEARING OFFICER DODUC: All right. It is 6 3:15, and we're back.

7 And before I turn to Mr. Aladjem for his cross, having learned from previous experience that we 8 9 tend to rush around 5:00 o'clock and don't get a chance 10 to repeat things for people who are watching the webcast, reminder that we will try to get through 11 12 Dr. Denton today, but we will stop at 5:00. In the 13 event that we are not finished with Dr. Denton, we will 14 return next week.

15 And after Mr. Denton, we will hear from Save 16 the California Delta Alliance, then followed by Pacific Coast Federation of Fishermen Association and LAND, 17 18 followed by North Delta C.A.R.E.S., Snug Harbor, 19 Clifton Court. But we have also reserved Friday of 20 next week for Dr. Susan Paulsen, representing Groups 13, 22, and 27. That's Sac Regional, City of Stockton, 21 22 and City of Antioch. 23

So we will notify you by no later thanWednesday. . .

25 MR. DEERINGER: Sorry. Just a reminder that

we're not meeting on Monday through Wednesday to anyone
 who forgot.
 CO-HEARING OFFICER DODUC: Yes. I thought
 everyone knew that by now.

5 We will send out a note to the service list or 6 the e-mail list or whatever it's called by noon on 7 Wednesday, reconfirming the schedule for Thursday and 8 Friday of next week.

9 Ms. Des Jardins.

10 MS. DES JARDINS: I did submit a motion for 11 reconsideration of the vacation of my notice calling 12 Tim Wehling. There were two points that I'm not sure 13 the Board was aware of.

14 CO-HEARING OFFICER DODUC: If it's in your 15 motion for reconsideration that you filed, we have it 16 in writing. There's no need to repeat it.

17 MS. DES JARDINS: Okay. Thank you.

18 CO-HEARING OFFICER DODUC: Any other

19 housekeeping matters?

20 (No response)

21 CO-HEARING OFFICER DODUC: All right. With

22 that, Mr. Aladjem.

23 CROSS-EXAMINATION BY MR. ALADJEM
24 MR. ALADJEM: Thank you, Madam Chair.
25 Dr. Denton, David Aladjem, Downey Brand, here

this afternoon on behalf the Tehama-Colousa Canal
 Authority and the City of Brentwood.

3 Madam Chair, as is your custom, I wanted to 4 tell you what I'm going to be cross-examining. The 5 first subject is going to be related to something that б Ms. Morris talked about before, in terms of the 7 modeling and the relationship to the CVP and State 8 Project shares of exports. 9 The second topic is what is colloquially 10 referred to as "Big Gulp, Little Sip." And the third section is a discussion of how 11 12 the modeling for CWF H3+ does not, in Dr. Denton's 13 opinion, reflect the operations of that project. Dr. Denton -- or actually, Mr. Hunt, could you 14 put up Exhibit CCC-SC-52. And could you get the 15 16 entire -- yeah. Dr. Denton, you're familiar with this exhibit? 17 18 WITNESS DENTON: Yes, I am. 19 MR. ALADJEM: Does this exhibit, Dr. Denton, show that, under the CWF H3+ modeling, there are some 20 21 months when the only water exported through the 22 isolated facility, the North Delta Diversion, is for 23 the Central Valley Project, the CVP? 24 WITNESS DENTON: Yes, it does. 25 MR. ALADJEM: And those months are depicted by

> California Reporting, LLC - (510) 224-4476 www.CaliforniaReporting.com

179

1 the yellow dots that are on the blue line that is

2 labeled "100 percent share"; is that correct? 3 WITNESS DENTON: That is correct -- uhm, the 4 100 percent share is taking 9,000 dividing by 2 and 5 getting 4500. And the actual amount is 4600, but. . . б MR. ALADJEM: Okay. Would it be that the dots 7 on that blue line represent that all of the water being 8 exported is CVP water? 9 WITNESS DENTON: Yes, a hundred percent share, 10 yes. MR. ALADJEM: Now, let me ask you this. For 11 12 any of the yellow dots here on this entire graphic 13 above the X axis, does that mean that there is CVP 14 water being exported? 15 WITNESS DENTON: Yes. 16 MR. ALADJEM: And is it the case that the yellow dots that are on the X axis itself would mean 17 18 that there is no CVP water being exported? 19 WITNESS DENTON: In those particular months, 20 yes. 21 MR. ALADJEM: I just want to understand the 22 figure first. 23 Mr. Hunt, could you turn to Dr. Denton's 24 exhibit Page 6, Line 27 through Page 7, Line 2. 25 And, Dr. Denton, you say here that the CVP

1 receives about 40 percent of the total exports?

WITNESS DENTON: Yes, and I have an exhibit 2 3 that describes what the average of all of that is. 4 MR. ALADJEM: And that analysis is depicted 5 graphically in CCC-SC-52, as we just saw? б WITNESS DENTON: Except I don't show what the 7 average is. I'm just showing the range of --8 MR. ALADJEM: But it would show bimonthly? 9 WITNESS DENTON: Yes, yes. MR. ALADJEM: Thank you. Based on the events 10 of last year, as discussed in your testimony, do you 11 12 spent that the CVP will receive 40 percent of total 13 exports in the future, with the project? WITNESS DENTON: With the project. You're 14 15 talking about the -- the direction in which the project 16 is going in terms of who's funding it? 17 MR. ALADJEM: Yes. 18 WITNESS DENTON: Or are you talking about 19 hydrology? In terms of funding. Yeah, it seems to me 20 21 that it is unlikely that they would be getting 22 40 percent of the share of a project they're not paying 23 for. 24 MR. ALADJEM: Are you aware, Dr. Denton, 25 whether the Bureau of Reclamation has approved the

1 California WaterFix project as part of CVP operations? 2 WITNESS DENTON: Pardon me? 3 MR. ALADJEM: Are you aware of whether the Bureau of Reclamation has approved CWF as part of its 4 5 operations of the Central Valley Project? б WITNESS DENTON: No, they --7 CO-HEARING OFFICER DODUC: Hold on. Hold on, 8 please. 9 Ms. Morris. 10 MS. MORRIS: I think the question is vague and ambiguous as to "approve as part of their project." I 11 12 mean, it's one thing to approve as a CEQA or NEPA, but 13 it's not clear what is meant by "approved." CO-HEARING OFFICER DODUC: Mr. Aladjem. 14 15 MR. ALADJEM: And Ms. Morris has just made my 16 point. Reclamation has not issue a record of decision 17 approving the project. 18 Thank you very much, Ms. Morris. 19 CO-HEARING OFFICER DODUC: Mr. Aladjem, you're not supposed to make argument during your 20 21 cross-examination which is devoted to asking questions 22 of Dr. Denton. We will strike that and ask you to 23 repeat or re-ask your question of Dr. Denton. 24 MR. ALADJEM: Let me retry that, Madam Chair. 25 Dr. Denton, are you aware whether the Bureau

1 of Reclamation has issued a record of decision for the 2 California WaterFix project?

3 WITNESS DENTON: No, they haven't. 4 MR. ALADJEM: Thank you. Is it possible that the Bureau of Reclamation could decide not to 5 б participate in the California WaterFix project? 7 MS. MORRIS: Objection, hypothetical -- calls for speculation. It's a -- he doesn't know. He hasn't 8 9 said. The only basis he has is -- in his testimony is 10 that Met approved paying for a larger share. MR. ALADJEM: Madam Chair, if we go back to 11 12 CCC-SC-52, he talks about a lot of those yellow dots on 13 the X axis are zero deliveries. CO-HEARING OFFICER DODUC: Mm-hmm. 14 15 MR. ALADJEM: I'm trying to explore what that 16 means. CO-HEARING OFFICER DODUC: And your question 17 18 to him was? 19 MR. ALADJEM: My question to him was, if Reclamation is not participating in the project as 20 21 indicated by no exports, what would be the impact? 22 That's what I'm trying to get at. 23 CO-HEARING OFFICER DODUC: And why do you need 24 to have that first part of the question? 25 MR. ALADJEM: I will retract the question.

1 CO-HEARING OFFICER DODUC: Thank you. 2 MR. ALADJEM: Dr. Denton, if there are no CVP 3 exports, as indicated here -- let me -- strike that. 4 Mr. Hunt, let's go to CCC-SC-51, Dr. Denton's 5 testimony, Page 7, beginning Line 11. б Dr. Denton, do you see that -- that statement 7 there? 8 WITNESS DENTON: Yes, I do. 9 MR. ALADJEM: Okay. And is it your opinion 10 that the modeling presented by the petitioners in this 11 proceeding does not properly analyze the impact of the 12 project, given your previous statement about funding? 13 WITNESS DENTON: Yes, if the percentage share of the CVP use of the tunnels goes close to zero or 14 15 zero, then it is going to have a substantial effect on 16 upstream reservoir operations, maybe exports, maybe 17 flows. 18 MR. ALADJEM: And does --19 CO-HEARING OFFICER DODUC: Hold on. Hold on. 20 Ms. Morris. 21 MS. MORRIS: I would just move to strike as 22 non-responsive. The question -- I don't know how you 23 can draw the conclusion that, because there is no 24 funding, that it would have zero allocation. It 25 completely ignores -- it mischaracterizes his testimony

1 that's already in the record.

2	CO-HEARING OFFICER DODUC: Dr. Denton, I
3	believe you answered this previously, but, again, what
4	is the basis of your speculation that links financing
5	commitment to water delivery?
б	WITNESS DENTON: I'm basing it on the idea
7	that, with CWF H3+, that had an assumption of a
8	percentage financial share of the CVP in the project;
9	if that percentage goes to zero or smaller, then the
10	sharing of the water going through the tunnel must also
11	change.
12	CO-HEARING OFFICER DODUC: And that is
13	premised on what?
14	WITNESS DENTON: Common sense.
15	CO-HEARING OFFICER DODUC: Common sense.
16	Okay. Is there common sense in the hearing record?
17	Strike that.
18	Mr. Berliner, do you have anything to add?
19	MR. BERLINER: It depends on your
20	CO-HEARING OFFICER DODUC: Can't hear you.
21	MR. BERLINER: Sorry. I was waiting for your
22	ruling on this.
23	CO-HEARING OFFICER DODUC: Ahh.
24	Mr. Aladjem, then, do you have something to
25	add?

1 MR. ALADJEM: No. In fact, I think that 2 Dr. Denton has answered my question amply, and I'm 3 going to move on. 4 CO-HEARING OFFICER DODUC: All right. Move 5 on. б MR. ALADJEM: Dr. Denton, if you could look at 7 the same page, Line 14 through 16. 8 WITNESS DENTON: This is Page 7? 9 MR. ALADJEM: Page 7. You say that the State 10 Board did not require petitioners to provide new modeling. Do you see that? 11 12 WITNESS DENTON: Yes. 13 MR. ALADJEM: Okay. MR. ALADJEM: With the modeling -- let me 14 15 rephrase that. 16 What modeling do you think that they needed to provide? 17 18 WITNESS DENTON: That we need to have --19 CO-HEARING OFFICER DODUC: Hold on. 20 Ms. Morris. MS. MORRIS: I believe that's outside the 21 22 scope of his testimony. He just said that they didn't 23 provide the right modeling. 24 CO-HEARING OFFICER DODUC: Then the question 25 naturally follows: What would be the right modeling?

1 I'm confused now.

2 MR. ALADJEM: Madam Chair? 3 CO-HEARING OFFICER DODUC: Yes, Mr. Aladjem. 4 MR. ALADJEM: The witness just made a 5 statement in his testimony. He says that the б petitioners didn't do something. I'm trying to 7 understand what they should have done -- in his 8 opinion. 9 CO-HEARING OFFICER DODUC: Ms. Morris. 10 MS. MORRIS: He actually says that the State Board didn't require the petitioners to provide new 11 12 modeling. CO-HEARING OFFICER DODUC: Can we see the 13 14 statement in question? 15 Okay. Now I've read the section. And why do 16 you need to ask the question, Mr. Aladjem? Because, from the sentence beginning on Line 14 and Line 16, 17 18 Dr. Denton seems to imply that that is the modeling 19 that should have been provided. MR. ALADJEM: Madam Chair, I'm going to go to 20 21 those next, to the sentences Lines 12 through 14 right 22 now. This was a setup to the question. CO-HEARING OFFICER DODUC: Oh, okay. And? 23 24 MR. ALADJEM: So, Dr. Denton, if you look at 25 Lines 12 through 14 -- okay? Is it fair to say that

1 the analysis should have included -- there should be

2 modeling analysis of upstream of the SWP and CVP

3 reservoir operations?

4 WITNESS DENTON: Yes.

5 MR. ALADJEM: Is it fair to say that there 6 should have been modeling analysis of environmental 7 impacts on key fish species downstream of those 8 reservoirs?

9 MS. MORRIS: Objection, this misstates the 10 record. There are those things in the record. If he's 11 asking specifically about a different split, he should 12 ask that question. But these are implying that there's 13 no modeling results at all on those issues, which is 14 incorrect.

15 CO-HEARING OFFICER DODUC: Mr. Aladjem, can we 16 caveat your last two questions as being modeling 17 reflective of this new sharing capacity?

18 MR. ALADJEM: That is a very fair

19 characterization of my questions.

20 Dr. Denton?

21 WITNESS DENTON: Oh, sorry. Could you ask
22 your question again, then?

23 MR. ALADJEM. Yes. Is it your opinion that 24 there should have been additional modeling reflective 25 of these new conditions on the two items we were

1 talking about, reservoir operations and environmental 2 impacts -- or environmental flows? Excuse me. WITNESS DENTON: Yes, I --3 4 CO-HEARING OFFICER DODUC: Hold on, please, 5 Dr. Denton. б MS. MORRIS: There's -- it assumes facts not 7 in evidence. There's no evidence in the record that 8 there's a different split. The only thing this witness 9 has said is that there is a financial change. That is 10 it. CO-HEARING OFFICER DODUC: Would you care to 11 rephrase in terms of the financial change and the 12 13 common sense interpretation that Dr. Denton made from 14 that financial change? MR. ALADJEM: I would be happy to do so. I 15 16 didn't believe -- I was trying to move through quickly to -- I needed to get to that level of detail. My 17 18 apologies. 19 Dr. Denton. WITNESS DENTON: Yes, from a common sense 20 21 point of view, the share will change, and therefore 22 there needs to be -- there needs to be new modeling to 23 explore all the effects of that. 24 MR. ALADJEM: Thank you, Dr. Denton. 25 Let me move on to the "big Gulp, Little Sip"

> California Reporting, LLC - (510) 224-4476 www.CaliforniaReporting.com

189

1 concept.

2 Mr. Hunt, could you put up CCC-SC-63, please. 3 And, Dr. Denton, you went through this with 4 Ms. Morris, so I'm going to skip many of my questions. 5 So give me a second here. б Dr. Denton, in your testimony, you use the 7 phrase "Big Gulp, Little Sip," correct? 8 WITNESS DENTON: Correct. 9 MR. ALADJEM: Could you describe in your own 10 words what that means? WITNESS DENTON: Certainly. It isn't 11 12 something that I invented, but I embraced it. It means 13 that, if we are to protect the Delta, we need to reduce or improve flows in the Delta during low flow periods, 14 15 and that would require reducing exports. And then we 16 would make up for that by having, for instance, storage south of the Delta to be able to capture more water 17 18 when water is available. 19 So you're taking a big gulp when there are high flows. And you have to store it so that later, 20 21 when there is a dry period, you can cut back on the 22 exports; in other words, export less than what we are 23 currently exporting. 24 MR. ALADJEM: And is it your opinion that the 25 operations that are reflected on CCC-SC-63 are

1 reflective of "Big Gulp, Little Sip"?

2	WITNESS DENTON: This one is because it's only
3	showing the lower end of flows, and it's really looking
4	at the "Little Sip" more directly. But it is alarming
5	that there is an intent, apparently, to increase
6	exports above existing conditions rather than reducing
7	reliability on the Delta in the dry period.
8	MR. ALADJEM: So in answer to some of the
9	questions over the last few days about modeling
10	assumptions do or do not reflect operational criteria,
11	isn't it clear that there are operational-type
12	assumptions embedded here that do not reflect how the
13	project will actually be operated?
14	WITNESS DENTON: Are you referring to this
15	particular grid?
16	MR. ALADJEM: Yes.
17	WITNESS DENTON: Well, that yeah, I've
18	identified a lot of issues with the modeling
19	assumptions, but this is a result of the modeling using
20	
	those, maybe, flawed assumptions. So that, to my mind,
21	those, maybe, flawed assumptions. So that, to my mind, is how they intend to operate it. And I presume that
21 22	
	is how they intend to operate it. And I presume that
22	is how they intend to operate it. And I presume that the petitioners have reviewed these data and are

1 If this CCC-SC-63 were really to reflect "Big 2 Gulp, Little Sip" -- and it's helpful that you said 3 this is the low end; this is the "Little Sip" piece of 4 it -- how would that distribution of yellow dots be 5 different?

б WITNESS DENTON: If it was operating to a 7 "Little Sip," then the yellow dots would stay below the green dashed line and preferably, because 3,000 cfs is 8 9 a really bare, bare-bones minimum flow in the Delta, 10 then maybe those yellow dots would be much further down. Maybe when it's 3,000 cfs, then they would only 11 export, say, 4,000 cubic feet per second because that 12 13 would be the time when the Delta would be the most 14 vulnerable.

15 MR. ALADJEM: Okay. Moving along to the third 16 portion of this, about modeling, Mr. Hunt, if you could 17 go back to Dr. Denton's testimony, Page 10, Lines 14 18 through 22.

19 Dr. Denton, if you see Line 19, you say -- you 20 discuss there is a corresponding increase in seawater 21 intrusion in the fall?

22 WITNESS DENTON: Yes.

23 MR. ALADJEM: Now I'd like, Mr. Hunt,

24 CCC-SC-56, Figure 1.

25 Dr. Denton, Boundary 1 water quality is worse

1 than No Action in which months on this chart?

2 WITNESS DENTON: It's worse in October, 3 November, December, January, February, March, June, and 4 September. MR. ALADJEM: And, Dr. Denton, would those 5 impacts be significant, in your opinion, in terms of б 7 effects on water quality? 8 CO-HEARING OFFICER DODUC: Hold on. 9 Ms. Morris. 10 MS. MORRIS: Object to the extent that it goes to water quality other than for public trust resources 11 12 as being outside the scope of this phase. 13 CO-HEARING OFFICER DODUC: Are you okay with 14 that caveat, Mr. Aladjem? 15 MR. ALADJEM: Ms. Morris, could you repeat 16 that? I just want to think about it one more time -- a 17 little bit. 18 MS. MORRIS: The objection was that it's 19 outside the scope if it goes beyond public trust resources, which is the Part 2 scope, or I thought it 20 21 was. 22 MR. ALADJEM: I'm fine with Ms. Morris's 23 stipulation. 24 WITNESS DENTON: Can I answer it? 25 MR. ALADJEM: The question is, would you limit

1 it --2 CO-HEARING OFFICER DODUC: Hold on, hold on, Mr. Aladjem. Mr. Deeringer differs. 3 4 MR. DEERINGER: Sorry. Do I understand, 5 Ms. Morris, your objection to mean that questions or answers that go to injury to legal users on б 7 cross-examination are not permissible during this phase? Is that where you were going with your 8 9 objection? 10 MS. MORRIS: I was on this particular question 11 because it deals with Boundary 1. 12 MR. DEERINGER: I believe the Hearing Officers 13 resolved that issue earlier today. MS. MORRIS: That was on a motion to strike. 14 15 And now I'm objecting to the question to the extent it 16 tries to go beyond the testimony. 17 CO-HEARING OFFICER DODUC: May I ask, 18 Mr. Aladjem, the -- where you're going with that 19 question? 20 MR. ALADJEM: Where I'm going, Madam Chair, is 21 we have a number of impacts here which Dr. Denton has 22 identified. By implication, I believe he thinks that 23 they are significant adverse impacts on the 24 environment. 25 I hadn't gotten as far as Ms. Morris's point

> California Reporting, LLC - (510) 224-4476 www.CaliforniaReporting.com

194

1 about whether it's public trust resources or M and I water quality. But I'm willing, for the sake of 2 3 Dr. Denton's response, to allow him to answer, 4 consistent with Ms. Morris's objection, to public trust 5 resources. б CO-HEARING OFFICER DODUC: All right. Let's 7 do that. 8 WITNESS DENTON: So in terms of public trust 9 resources, this is -- increases in September, October, 10 November are indicative, for instance, of increases in Fall X2, which is known to be -- have effect on fish. 11 So from a salinity intrusion point of view, Fall X2, 12

13 then there are direct links hear with respect to the 14 Fall X2 and therefore with respect to fish.

But there are -- there are other effects of salinity on ecosystem -- ecosystem and various species in the Delta that can occur at smaller salinity levels. But I'm not a biologist, so I can't talk to that. MR. ALADJEM: I understand, sir. But, Dr. Denton, you were involved in the 1994 Bay-Delta Accord; were you not?

22 WITNESS DENTON: Yes, I was.

23 MR. ALADJEM: And in the course of those
24 discussions and your experience at Contra Costa Water
25 District, you've heard a great deal -- you're familiar

1 with ecological operative conditions in the Western

2 Delta, correct?

3 MS. MORRIS: Objection as to beyond the scope. I don't understand the relevance of the 1994. 4 CO-HEARING OFFICER DODUC: I assume these are 5 б foundational questions? Perhaps you --7 MR. ALADJEM: These are foundations, Madam 8 Chair. 9 CO-HEARING OFFICER DODUC: All right. Let's 10 see where he goes MR. ALADJEM: So Dr. Denton, going to this 11 question of public trust resources in the Western Delta 12 13 which we were just discussing, while you are not a biologist, is it your opinion that the changes in 14 15 salinity, particularly in the fall months, as I heard 16 you correctly, would have an adverse effect on fish and wildlife resources? 17 18 WITNESS DENTON: That was the underlying 19 principle of the Bay-Delta Accord. 20 MR. ALADJEM: Thank you. WITNESS DENTON: We needed to control salinity 21 22 intrusion. 23 MR. ALADJEM: Dr. Denton, during your 24 PowerPoint presentation, you laid out some principles 25 for permit terms and conditions.

1 WITNESS DENTON: Yes.

2 MR. ALADJEM: Have you given any thought to 3 the permit term and condition that would protect water quality in the Western Delta? 4 5 WITNESS DENTON: Not -б MS. MORRIS: Objection. 7 CO-HEARING OFFICER DODUC: Ms. Morris. 8 MS. MORRIS: Goes beyond the scope of his 9 testimony. He doesn't talk specifically --10 CO-HEARING OFFICER DODUC: Ms. Morris, your microphone is not on. 11 12 MS. MORRIS: I'm so sorry. It goes beyond the 13 scope of his testimony. He does -- his principles for developing permit conditions are not specific to any 14 15 area in the Delta. They're specific to the WaterFix 16 project. 17 CO-HEARING OFFICER DODUC: Let's pull up his 18 presentation, please. I've forgotten all the details 19 in it. I believe it's towards the end. MR. ALADJEM: Mr. Hunt, I believe it was 20 21 Slide 8; I'm not positive of that. 22 WITNESS DENTON: Slide 25. CO-HEARING OFFICER DODUC: It was toward the 23 24 end. 25 WITNESS DENTON: Yes, Slide 25.

CO-HEARING OFFICER DODUC: All right. And the
 question was, Mr. Aladjem?

3 MR. ALADJEM: Whether Dr. Denton -- he has 4 here a very nice list of principles for developing 5 permit terms. б The first -- or excuse me, the second, "Ensure 7 proposed project exports limits less water in drier 8 periods" would seem to me to go to protecting water 9 quality in the Western Delta as that is the most 10 sensitive place in the Delta. That's what I want to try to get at. 11 CO-HEARING OFFICER DODUC: Ms. Morris. 12 13 MS. MORRIS: Just the question assumes facts not in evidence. 14 15 MR. ALADJEM: He's an expert, so I can ask --16 CO-HEARING OFFICER DODUC: Ask. MR. ALADJEM: Dr. Denton, since I'm sure you 17 18 don't remember the question, let me pose it again. 19 Have you given any consideration to proposed 20 permit terms and conditions to protect water quality in 21 the Western Delta? 22 WITNESS DENTON: Not specifically. 23 MR. ALADJEM: Okay. Thank you. 24 Mr. Hunt, could you go back to Dr. Denton's 25 testimony Page 21.

1 And Dr. Denton, this is just a couple 2 questions about the export-inflow ratio or otherwise 3 known as the E/I ratio. 4 Am I correct in understanding that one of the 5 purposes of the Bay-Delta Accord which started the б discussion of the E/I ratio was to protect fish, eggs, 7 and larvae from entrainment? 8 WITNESS DENTON: Yes, it was. And that got 9 carried through into language in the May 1995 Water 10 Quality Control Plan and subsequent documents like that. 11 12 MR. ALADJEM: And your testimony says that the 13 petitioners have modified the E/I ratio calculation to exclude exports from the North Delta Diversion, 14 15 correct? 16 WITNESS DENTON: Correct. MR. ALADJEM: And it is your recommendation to 17 18 the Water Board that they include a permit term and 19 condition that would include those exports? WITNESS DENTON: Yes. 20 21 MR. ALADJEM: Is it your opinion that the 22 reason for that is to prevent the entrainment of fish, 23 larvae, and eggs at the North Delta Diversion? 24 WITNESS DENTON: Yes. 25 MR. ALADJEM: Let's see here. Mr. Hunt,

1 Page 30. 2 Dr. Denton, is it your understanding that the 3 July 2017 "Developments After Publication of the 4 Proposed Final Environmental Impact Report, " that 5 petitioners removed provisions for Old and Middle б River, OMR, flow requirements as an operational 7 criterion? 8 WITNESS DENTON: Yes. 9 And is it your opinion that the elimination of 10 the OMR criteria would result in quote/unquote "large increases in chloride concentration"? 11 WITNESS DENTON: Yes. 12 13 MR. ALADJEM: And to your knowledge, have these effects been compared to the No Action 14 15 Alternative? 16 WITNESS DENTON: By me or by other people? MR. ALADJEM: By you -- or by anyone. Let's 17 18 get you first. 19 WITNESS DENTON: My graphs do make those sort of comparisons with what are the changes relative to 20 21 the No Action Alternative. 22 MR. ALADJEM: And in your opinion, what is the effect of that? 23 24 WITNESS DENTON: That there are increases in 25 salinity above the No Action Alternative.

1 MR. ALADJEM: Okay.

2 WITNESS DENTON: Which weren't apparent in the 3 earlier versions of the model.

4 MR. ALADJEM: Let's go to CCC-SC-55 and Figure 5 No. 2, Mr. Hunt, if you would.

6 Okay. Dr. Denton, for what months here in 7 this exhibit would the EC levels associated with the 8 California WaterFix H3+ be greater than No Action 9 Alternative?

10 WITNESS DENTON: Okay. So, October -- you're 11 talking about the red bar compared to the gray bar. So 12 October, November, and then again in February, March, 13 April, May, and June.

MR. ALADJEM: And bearing in mind our previous 14 15 discussion with Ms. Morris, would you say those effects 16 would be significant on public trust resources? 17 WITNESS DENTON: Yes. 18 CO-HEARING OFFICER DODUC: I don't think 19 that's what she said, but since she's not -- never 20 mind. MR. ALADJEM: Mr. Hunt, CCC-SC -- if you could 21 22 pull up CCC-SC-60.

And Dr. Denton, am I correct in understanding this as the 82-year period of record results but only for the month of November?

WITNESS DENTON: Yes, that's right. That is
 the month when salinities usually are highest -- or in
 the fall, anyway.

4 MR. ALADJEM: And you said in your testimony 5 that the very high levels here of EC should not be 6 dismissed as an anomaly. But that was discussing the 7 November values.

8 In your opinion -- or strike that. 9 Have you done a similar analysis for other 10 months? 11 WITNESS DENTON: I have, but I didn't enter 12 them into the record. There are similar-looking

13 graphs. MR. ALADJEM: So the results are similar to 14 15 this graph. And again, bearing in mind the discussion 16 we had with Ms. Morris before, would these impacts be 17 significant and adverse on public trust resources? 18 WITNESS DENTON: If they were real, in the 19 sense that this is a modeling study that purports to be meeting D1641, in which case all the daily salinities 20 21 in the area of Rock Slough should be below the red 22 dashed line, which is this de- --

23 MR. ALADJEM: But the results of the modeling24 indicated they would not be?

25 WITNESS DENTON: Exactly.

1 MR. ALADJEM: Okay. 2 Mr. Hunt, going back to Dr. Denton's 3 PowerPoint, I believe it was Page 25, the principles 4 for permit terms. 5 In light of the analysis you've done on water б quality that we've just discussed for the last few 7 minutes, is there a permit term that you would 8 recommend to the Water Board such as, for example, 9 strengthening the D1641 requirements for EC? 10 CO-HEARING OFFICER DODUC: Hold on. Ms. Morris. 11 12 MS. MORRIS: I'm sure I will not like the 13 result, but I'm going to object as outside the scope because he had the opportunity to do permit terms; he 14 15 has provided that information. And this goes beyond 16 that testimony. 17 MR. ALADJEM: Madam Chair? 18 CO-HEARING OFFICER DODUC: Mr. Aladjem. 19 MR. ALADJEM: He has provided principles. And 20 I'm trying to understand how we take principles and 21 actually put permit terms together. That is, I think, 22 something very helpful for the Board as you go into the 23 next phase of this process. CO-HEARING OFFICER DODUC: And we have 24 25 repeatedly said that proposed terms are welcome at any

1 time.

2 So, overruled, Ms. Morris. 3 MR. ALADJEM: Dr. Denton --MR. BERLINER: I'm sorry. I have a different 4 5 objection this question. б CO-HEARING OFFICER DODUC: Mr. Berliner. 7 MR. BERLINER: Yes. This question is beyond the scope of this proceedings. Amendments to D1641 was 8 9 not noticed by the Board as part of this proceeding. 10 So questions regarding amendments to 1641 would be 11 improper, in regards to amending it. 12 CO-HEARING OFFICER DODUC: So perhaps you 13 could strike out any mention of amendments. MR. ALADJEM: I will strike-out the last bit 14 15 of my question and leave it entirely open-ended to 16 Dr. Denton. 17 CO-HEARING OFFICER DODUC: As far as proposed 18 terms and conditions. 19 WITNESS DENTON: I think the obvious one -and I did mention it in my testimony, so it's good that 20 21 you're questioning me on it -- would be to ensure that 22 Fall X2 was in there as a permit term because that's the major difference with Boundary 1, that there is no 23 24 Fall X2. 25 But I haven't actually thought about those

1 terms beyond that, but we will put them in our closing 2 brief.

3 MR. ALADJEM: Thank you, Dr. Denton. Madam Chair, no further questions. 4 5 CO-HEARING OFFICER DODUC: Thank you, Mr. Aladjem. б 7 Mr. Ruiz, you're up next. MS. DES JARDINS: Madam Chair? 8 9 CO-HEARING OFFICER DODUC: Hold on. 10 MS. DES JARDINS: May I ask a question because I wasn't aware -- the hearing notice is determining 11 12 appropriate Delta flow criteria. And I'm a little 13 confused by the previous ruling. So is it determining appropriate Delta flow 14 15 criteria but nothing that's included in D1641? I'm 16 just -- I wasn't aware that there was a limitation on the scope. So I was just asking for a clarification of 17 the ruling that modification of D1641 standards was 18 19 beyond the scope of this proceeding. MR. DEERINGER: The D1641 standards are the 20 21 result of a -- I may get the term wrong -- a 22 quasi-legislative process. It's the setting of water 23 quality standards. 24 As the hearing notice goes into some detail to 25 explain, the reference in the Delta Reform Act and in

the hearing notice to setting appropriate Delta flow criteria has to do with criteria that would apply specifically to the operation of this project or as D1641 relates to water quality standards that are applicable generally.

6 MS. DES JARDINS: Is that limitation about 7 setting appropriate Delta flow criteria -- I mean, my 8 understanding was that the scope of this project was 9 appropriate Delta flow criteria that could be 10 incorporated in the order taking action on the 11 petition, which would limit the scope to that of the 12 permits of the petitioners.

But it seems like -- is there a further limitation and it's only what's defined as the WaterFix project?

MR. DEERINGER: Other than what's already in the hearing notice, I can't summarize it any better than changing D1641 changes water quality standards for everyone; whereas, appropriate Delta flow criteria would be specific to this project.

21 MS. DES JARDINS: So then if one asked, for 22 example, about a salinity standard, one might be able 23 to ask about a salinity standard that applied only to 24 the projects?

25 MR. DEERINGER: I guess we won't know until

you try. I'm sorry. I can't provide any further
 clarification on that.

3 CO-HEARING OFFICER DODUC: Mr. Ferguson. MR. FERGUSON: Yeah, Aaron Ferguson, County of 4 5 Sacramento. I apologize for the late request, but б could I reserve ten minutes for questions here? 7 CO-HEARING OFFICER DODUC: What group number 8 are you? 9 MR. FERGUSON: I'd be 45, I think. 10 CO-HEARING OFFICER DODUC: All right. Mr. Ruiz. 11 12 CROSS-EXAMINATION BY MR. RUIZ 13 MR. RUIZ: Good afternoon, Dr. Denton. 14 Dean Ruiz for the South Delta Water Agency protestants 15 I just have a couple questions, a few questions related 16 to following up on some of the previous 17 cross-examination today. 18 Earlier, in -- during Ms. Morris's cross, I 19 think you brought up a chart that showed increased outflow in March from the project but yet reduced Delta 20 21 outflow in April and May; is that correct? 22 WITNESS DENTON: That's correct. 23 MR. RUIZ: And I think you also said something 24 about, though there would be somewhat of an increase in 25 March, that typically when you see increased outflow,

1 you would also see a corresponding increase or

2 improvement in water quality, but you didn't see that 3 for March. Is that a correct assessment of what you 4 said?

5 WITNESS DENTON: That's an interpretation of 6 the data that is shown. I didn't look at individual 7 months, but just looking at the averages.

8 MR. RUIZ: And for the average, in terms of 9 you having increase in Delta outflow and then you've 10 got the other decreases in the spring months, why is 11 it, in your opinion, that there would also not be a 12 corresponding improvement in water quality in March? 13 WITNESS DENTON: I didn't have time to look 14 into that in any detail.

15 MR. RUIZ: Okay. Also, there was a -- related 16 to the same topic, there was some questions and some 17 back and forth with regard to one of the months 18 resulting from the project that there would be possibly 19 up to a 20 percent increase in outflow for a particular month above the No Action or supposedly a 20 percent 20 21 increase. Do you remember that? 22 WITNESS DENTON: No, I'm not sure. Could you

23 bring up the graph for it?

24 MR. RUIZ: Well, if you don't recall, then I 25 don't -- we'll just move on.

1 WITNESS DENTON: I think she was talking about 2 by total exports versus net Delta outflow and trying to 3 die it back to D1641 values. But that wasn't quite the 4 question you asked, I think. 5 MR. RUIZ: We'll just move beyond that one. б There was just a chart up, a graph up just a 7 moment ago, CCC-SC-55, I believe, with regard to 8 salinity levels at Old River and Bacon Island. Do you 9 remember that? 10 WITNESS DENTON: I do. MR. RUIZ: Now, those increases in salinity 11 that you were showing or that were shown there were 12 13 based on monthly averages, correct? 14 WITNESS DENTON: They were 82-year averages 15 for each month 16 MR. RUIZ: Okay. And those didn't break it down by daily averages or anything less than the 17 18 monthly averages you discussed, correct? 19 WITNESS DENTON: Exactly. So that the variation by month -- by actual days or month is much 20 21 larger. 22 MR. RUIZ: Okay. And if there was a -- during 23 that same time frame, if there's a slight or a decrease 24 in salinity for one month, does that any in any way 25 offset the increases in salinity for other months?

1 WITNESS DENTON: In terms of averaging? 2 MR. RUIZ: In terms of impact from salinity or 3 the presence of salinity in the system. WITNESS DENTON: No, that is the problem --4 CO-HEARING OFFICER DODUC: Hold on, please. 5 Mr. Berliner. б 7 MR. BERLINER: Objections -- objection, the question is vague with regard to impact on what. 8 9 MR. RUIZ: And I think I had clarified that in 10 terms of impact with regard to additional salinity in the system, in the Delta. And Mr. -- Dr. Denton was 11 12 beginning to explain his answer. 13 CO-HEARING OFFICER DODUC: Where in the Delta 14 specifically? 15 MR. RUIZ: In the -- at the area of Bacon 16 Island. 17 MR. BERLINER: An impact to fisheries or --18 MR. RUIZ: Impact to fisheries, impact to 19 salinity levels in general. But, yes, impact to fisheries, impact to salinity levels in the system at 20 21 that point in the Delta. WITNESS DENTON: I think that's something we 22 need to watch out for in the Delta, having good water 23 24 quality or good conditions for some -- a number of the 25 months and then having really bad conditions for a few

months, doesn't average out -- just because that averages out to be somewhat good doesn't mean there is some kind of -- there isn't some kind of impact in particular months where it is much, much worse in terms of degradation. MR. RUIZ: Okay. Thank you. And last question. And this is more of a general question with

8 regard to the models that are referenced within your 9 testimony. There's -- you comment on modeling done by 10 Erik Reyes, who is a CalSim modeler, correct?

11 WITNESS DENTON: Yes, he was testifying to 12 CalSim modeling.

13 MR. RUIZ: My question is what is the utility, in your mind, or the usefulness of using CalSim to 14 15 develop water quality results and compared to using 16 DSM-2 for that purpose? What's the difference? 17 CO-HEARING OFFICER DODUC: And I'm sorry. 18 Help me to understand the question, again? 19 MR. RUIZ: My question is I'm asking him 20 generally about -- we've got some -- generally, we've 21 got a lot of DSM-2-related modeling testimony. 22 CO-HEARING OFFICER DODUC: Yes. 23 MR. RUIZ: We have some from Mr. Reyes with 24 regard to water quality. I'm trying to -- using 25 CalSim. I'm just asking Dr. Denton his opinion of the

utility of using CalSim as a water -- to derive water
 quality results.

3 WITNESS DENTON: Seems to be the --4 MR. BERLINER: It's beyond the scope. 5 CO-HEARING OFFICER DODUC: Yeah, I'm thinking б how does this tie into his rebuttal testimony? 7 MR. RUIZ: Well, to be perfectly honest, this is a very general modeling question that I would like 8 9 to get -- I'm trying to understand for my own 10 edification. I thought it might be helpful to others as well. As far as it ties back, I would admit it 11 12 loosely ties --CO-HEARING OFFICER DODUC: It ties back to 13 14 Ms. Morris's cross-examination. And, again, 15 questions -- answers provided on cross-examination do 16 not expand the scope of rebuttal testimony, which is 17 the scope of cross. MR. RUIZ: I can withdraw -- I'll withdraw the 18 19 question. That's all I had. CO-HEARING OFFICER DODUC: I'm sorry to do 20 21 that to you. 22 MR. RUIZ: No, that's okay. 23 CO-HEARING OFFICER DODUC: Are you sure you 24 don't have more questions? 25 MR. RUIZ: No, I don't. I thought everybody

else would think was a great question and want to know 1 the difference also. But it didn't stick within the 2 3 scope. 4 CO-HEARING OFFICER DODUC: Perhaps you can ask 5 Dr. Denton. б MR. RUIZ: I will do so. 7 CO-HEARING OFFICER DODUC: And since Mr. Jackson is not here, next up is Ms. Des Jardins. 8 9 CROSS-EXAMINATION BY MS. DES JARDINS 10 MS. DES JARDINS: Good afternoon, Dr. Denton. WITNESS DENTON: Good afternoon. 11 12 MS. DES JARDINS: I'm Deirdre Des Jardins with 13 California Water Research. And I'd like to bring up Dr. Denton's written 14 15 testimony, Exhibit CCC-SC-51, please, at Page 21. And 16 I wanted to -- let's scroll down to Line 18, please, 18 through -- yeah. 17 18 So I found this -- you have some testimony 19 here, "The redefinition of the export-to-inflow ratio means that exports through the North Delta intakes 20 21 would be unconstrained by the export/inflow standard." 22 Can you explain that in more detail? WITNESS DENTON: Yes, the -- the North Delta 23 24 Diversions are not included in that particular 25 standard.

1 So if you have a standard saying that the 2 export/inflow ratio has to be a certain value, then it 3 doesn't matter what the North Delta intake diversions 4 are. They're not going to affect the calculation of 5 that value because it doesn't include it. б MS. DES JARDINS: And I guess you state 7 further, "If South Delta exports are zero, then the 8 export/inflow ratio as redefined by the petitioners is 9 also zero"? 10 WITNESS DENTON: Yes, that's just saying that, in situations where it happened to be that all the 11 diversions were in the North Delta, then when you went 12 13 to calculate the E/I ratio, it would be by definition zero. So there would definitely be no constraints at 14 15 that point.

16 MS. DES JARDINS: So are you aware that the 17 modeling assumes preferential use of the South Delta 18 diversions in July, August and September?

19 WITNESS DENTON: I've done a little bit of 20 work on that, looking at it.

MS. DES JARDINS: Are you aware that that
operation is proposed to be discretionary?
WITNESS DENTON: Discretionary?
MS. DES JARDINS: Yes.

25 WITNESS DENTON: That, I'm not aware of. What

1 I am aware of, that that was a term in CCWD's

2 settlement agreement, that there would be preferential 3 South Delta pumping in certain months. But I wasn't aware that it had changed in terms of the current 4 5 operations or operating criteria. б MS. DES JARDINS: It is included in the 7 modeling. 8 So I'd like to go to Page 29 at 23. 9 And it says, "Removal of export constraints in 10 the fall results in lower Delta" -- you say it also results in lower Delta outflow and higher salinity? Is 11 12 that from examining the modeling data? WITNESS DENTON: That's not something that I 13 said. I'm quoting from their testimony, their exhibit. 14 15 It's identified. So I just cut and pasted their --16 their words there. MS. DES JARDINS: Okay. So given the higher 17 18 salinity, I mean, it -- I -- I don't have but -- would 19 there be -- would you have any recommendations about conditions that would apply to -- to project operations 20 21 in terms of salinity? 22 WITNESS DENTON: Not on that particular topic

23 in the sense that, in my Part 2 case in chief, I talked 24 about how the outflows at that time, because of that 25 constraint, were artificially high. And so that has

now been removed, and the true water quality impacts
 have been revealed.

3 But I -- at this stage, I haven't got a term 4 for that or a permit. MS. DES JARDINS: Okay. I'd also like to go 5 б to CCC-SC-54, please. And I'd like to go to Page 3. And I wanted to look in the fall, in September --7 8 particularly. 9 So aren't there fairly significant reductions 10 in outflows in July, August, and September? WITNESS DENTON: Which case? 11 12 MS. DES JARDINS: In -- well, particularly for 13 Boundary 1 but also with CWF H3+. Well, actually, in July and August for Boundary 1 and CWF H3+. 14 15 WITNESS DENTON: Yes, in July and August, the 16 Table 1 shows that CWF H3+ and Boundary 1 have lower outflows than the No Action Alternative. 17 18 MS. DES JARDINS: And in September, there's 19 significant reduc- -- it's almost half over the other 20 alternatives? WITNESS DENTON: Only in Boundary 1 though, 21 22 but not CWF H3+. 23 MS. DES JARDINS: Yeah. And the only -- so 24 are you aware that -- I think you testified -- are you 25 aware that the future -- I believe your testimony is

1 that future operations of the project could still

2 change under adaptive management?

3 WITNESS DENTON: Yes. MS. DES JARDINS: And so could these effects 4 5 of reduction in outflow potentially get worse if the б operations were changed under adaptive management? WITNESS DENTON: Well, my testimony was that 7 in Part 2 we're focusing on CWF H3+, but Boundary 1 is 8 9 still a possibility in the future of the way the 10 project would operate. So we need to keep track of what the impacts of Boundary 1 are, not just the 11 12 impacts of CWF H3+. MS. DES JARDINS: Thank you. And then I'd 13 like to finally go to Exhibit SWRCB-27, PDF Page 32. 14 15 These are the water quality standards. Click on --16 yeah. And it's PDF Page 32 is the Table 4 standards. And, Dr. Denton, you were involved in 17 18 developing these -- these minimum outflow standards 19 apply -- scroll out again a little bit, or scroll --20 yeah. 21 So these minimum outflow standards apply when 22 a Port Chicago trigger happens in the spring; is that 23 correct?

24 WITNESS DENTON: Well, there are a number of25 days per month essentially equivalent to outflows. But

California Reporting, LLC - (510) 224-4476 www.CaliforniaReporting.com 217

1 they -- they're more -- there are a number of days 2 salinity has to be a certain value. And that gets 3 triggered by conditions at the end of the previous 4 month at Port Chicago. 5 MS. DES JARDINS: And so the days when EC has б to be 2.64 millimhos per centimeter, at Port Chicago 7 probably the NDO needed is -- it's roughly equivalent 8 to outflow of 29,200 cfs? 9 WITNESS DENTON: Yes. 10 MS. DES JARDINS: So during those months, the minimum Delta outflow is more than -- more than just 11 12 that shown in Table 3, correct? 13 WITNESS DENTON: Which Table 3? Sorry. Are 14 you talking about D1641? MS. DES JARDINS: Yeah, D1641, Table 3. 15 16 WITNESS DENTON: Right. But it's only for a certain number of days. It's -- under some conditions 17 18 it would have to be maintained at 29,200 for the whole 19 month. MS. DES JARDINS: Yeah. So if there was a 20 21 reduction in exports from -- if there was a reduction 22 or if there was significant -- a reduction in flows, inflows into the Delta, during months when you had this 23 24 Port Chicago requirement, that could be significant, 25 correct?

WITNESS DENTON: Significant on what? 1 MS. DES JARDINS: It could be significant in 2 3 terms of impacting required Delta outflow? 4 WITNESS DENTON: I'm not sure I can answer 5 that question. б MS. DES JARDINS: Okay. I think -- but there 7 are months under D1641 in which -- in the spring, in 8 which -- days when outflows of 29,200 cfs are required 9 under the current standards? WITNESS DENTON: Yes, and that's usually 10 months where the previous month has been very wet, so 11 12 the salinity is very low and it needs to be maintained for a number of more days, according to this table. 13 MS. DES JARDINS: Okay. Thank you. That 14 15 concludes my questions. 16 CO-HEARING OFFICER DODUC: Ms. Meserve? 17 Followed by Mr. Ferguson. 18 I guess Ms. Meserve is kindly allowing 19 Mr. Ferguson to go first? MS. MESERVE: I'm 47. 20 21 CO-HEARING OFFICER DODUC: Yes, but you asked 22 before he did. MS. MESERVE: Oh, you're so kind. 23 24 CO-HEARING OFFICER DODUC: He came in late, 25 Ms. Meserve.

1 CROSS-EXAMINATION BY MR. FERGUSON 2 MR. FERGUSON: Good afternoon, Dr. Denton. 3 I'm Aaron Ferguson. I'm representing the County of 4 Sacramento. In your testimony, you state that the MWD 5 б Board -- and this was at the time you wrote your 7 testimony -- is scheduled to vote to pay for the entire 8 second tunnel and its share of the first tunnel, 9 correct? 10 WITNESS DENTON: Correct. 11 MR. FERGUSON: And then you also indicated that the CVP share of the Twin Tunnels diversions will 12 13 therefore be much less than assumed in CWF H3+ and possibly even zero, correct? 14 15 WITNESS DENTON: Yes. 16 MR. FERGUSON: And I believe you relied on Exhibit CCC-SC-67 to help inform this opinion; is that 17 18 correct? 19 WITNESS DENTON: Yes, that's just an excerpt of the whole PowerPoint that was printed in --20 21 MR. FERGUSON: Yes. Mr. Hunt, could we please bring up that exhibit. I think it's the second slide. 22 Excuse me, the third slide. 23 24 So is it your understanding, Dr. Denton, in 25 this slide, that it represents project yield with two

1 tunnels in place?

2	WITNESS DENTON: Yes. It was my impression
3	that the idea of a 6,000 cfs tunnel was put aside, no
4	longer under consideration and that this graph was
5	dealing with a 9,000 for twin tunnel, 9,000 cfs
6	capacity project.
7	MR. FERGUSON: Okay. So is it your
8	understanding that the bar on the left reflects yield
9	in a scenario where the State Water Project owns a
10	67 percent share and the CVP owns a 33 percent share?
11	WITNESS DENTON: I'm not sure about that. I'm
12	not sure whether that represents the ownership or the
13	actual percentage of exports that they get.
14	MR. FERGUSON: Okay, fair enough.
15	That's the title of it, the slide.
16	So you're okay. And to the extent it
17	represents exports, is it your understanding that the
18	left bar shows export yield for the SWP and the CVP at
19	a 67-to-33 percent ratio.
20	CO-HEARING OFFICER DODUC: Ms. Morris.
21	MS. MORRIS: Objection, calls for speculation.
22	Also I think it's, again, outside the scope. The point
23	of this testimony was limited to Page 7, which was to
24	say that Met was taking an action about the costs, not
25	to go to the allocations or the export improvements or

1 anything of that nature.

2	MR. FERGUSON: I'm also focused on Lines 11
3	through 12, where he talked about the impacts to
4	this the changes in the potential CVP yield, which
5	I'm going to get to here in a second.
6	CO-HEARING OFFICER DODUC: Are you as I
7	interpreted his question, he's simply asking you,
8	Dr. Denton, to confirm what's on this slide.
9	So far, that's your question, right?
10	MR. FERGUSON: Yes. I'm confirming his basis
11	for his opinions about the CVP yield if the MWD is
12	controlling.
13	CO-HEARING OFFICER DODUC: All right.
14	Go ahead.
15	MR. FERGUSON: Okay. So then the could I
16	have an answer to the question? Do you recall the
17	question?
18	WITNESS DENTON: In terms of this particular
19	exhibit, I put it in there just as evidence that Met
20	was considering purchasing the second tunnel.
21	The other thing that I'd like to add is
22	that those data that got placed in there, on a previous
23	slide, they actually mention that this is based on ${ m H3}$
24	H4 modeling, which is not CWF H3+.
25	So some of this is not even current to the

1 modeling that they were presenting, so we shouldn't get 2 into too much detail.

3 MR. FERGUSON: Okay. Fair enough. Is it your 4 understanding that the right-hand bar represents a 5 scenario where the SWP is receiving all of the export 6 yield?

7 WITNESS DENTON: That's what it implies by the 8 title there.

9 MR. FERGUSON: And the CVP is not receiving 10 any yield under that scenario? And, again, this is a 11 two-tunnel, 9,000 cfs scenario represented on this 12 page?

WITNESS DENTON: Just for clarification, 13 though, the discussion is of how much water is exported 14 15 via the tunnels from the North Delta and what share 16 that would be. It would be a little bit offsetting in the south. But water that the CVP no longer is able to 17 18 take from the North Delta, they might be able to make 19 up in the South Delta. But until we see the modeling, we won't know what that make-up would be. 20

21 MR. FERGUSON: And is it -- does it appear to 22 you from this graph that in the right bar, the SWP is 23 receiving -- more exports are going to the SWP in the 24 right-hand bar as compared to the SWP in the left-hand 25 bar?

1 WITNESS DENTON: Yes.

2 MR. FERGUSON: By how much would you say, just 3 to eyeball it?

4 WITNESS DENTON: 20 percent maybe.

5 MR. FERGUSON: Well, in terms of acre-feet?
6 WITNESS DENTON: Slightly more than a million
7 acre-feet.

8 MR. FERGUSON: What's the difference between9 the two?

10 WITNESS DENTON: Oh, yeah, it's a bit hard to 11 tell here without horizontal lines.

MR. FERGUSON: Maybe a hundred thousand acre-feet?

MS. MORRIS: I'm just going to object on relevance. The witness testified that he knew that this was H3, H4 modeling, it's not H3+, and therefore it's irrelevant.

18 CO-HEARING OFFICER DODUC: And it's asked and 19 answered.

20 MR. FERGUSON: I think I can move on.

21 So I believe I heard you testify on direct 22 that you thought exports were a more important 23 indicator, perhaps, of potential impacts on the Delta, 24 say, compared to looking at deliveries; is that fair? 25 WITNESS DENTON: Yes, definitely.

MR. FERGUSON: Could you explain why you
believe that's the case, that it's important to look at
exports?

WITNESS DENTON: Well, if you're looking at 4 5 indicators of impacts on fish in terms of OMR, Old and Middle River flows, it impacts on Delta outflow, б salinity, things like that. Exports will be having the 7 direct effect. And then when you actually deliver that 8 9 water much later in Southern California, it's going to 10 have water coming out of the terminal reservoirs; it's 11 going to have water coming out of San Luis. 12 So it's not indicative in that particular 13 month or that particular year as to what the impacts are on diversions from South Delta or the North Delta. 14 15 So it's not a good indicator of what's happening in the 16 Delta if you're looking at just deliveries. MR. FERGUSON: Okay. Thank you. 17 18 And, finally, you stated that the CWF H3+ 19 increases salinities in October, November, February, 20 March, and April compared to H3 and H4; is that 21 correct? 22 WITNESS DENTON: I believe that's correct. I 23 don't remember the exact months. 24 MR. FERGUSON: And then you also indicated that the only mitigation that's offered is adaptive 25

> California Reporting, LLC - (510) 224-4476 www.CaliforniaReporting.com

225

1 management of Delta operations? I believe that's WQ11.

2 WITNESS DENTON: Yes, and it's more focused in 3 on Emmaton, the Emmaton standard and times when the 4 Emmaton standard applies. So it's not really something 5 that's addressing my issue with respect to Bacon Island 6 and other places in the Delta.

7 MR. FERGUSON: Okay. That's what I was going 8 to get at. So by "only," you seem to imply that you 9 had concerns about that mitigation measure; is that 10 correct?

WITNESS DENTON: Well, I'm concerned about the 11 vagueness of it as well. It's just -- they are 12 promising to do their best through real-time operations 13 14 to somehow offset and by changing the percentage or the 15 amount going out through the North Delta intakes and 16 South Delta intakes to somehow improve water quality. 17 But there's no -- there will be no way of judging what 18 effect that's had or no goal as to maintain a certain 19 water quality. It was just saying, "We're going to 20 make these operations."

But the concern would be, in the South Delta somewhere, there might be a water quality that in the No Action is certain value, then it increases; there's degradation with the project. But it's below a State Board standard, so why would these operations be

1 focused on improv- -- offsetting or reducing that

2 particular degradation?

3 It really needs to be tied to some kind of 4 goal if you're going to have real-time operations to 5 mitigate water quality degradation. б MR. FERGUSON: Thank you very much. 7 That concludes my questions. 8 CO-HEARING OFFICER DODUC: Ms. Meserve. 9 CROSS-EXAMINATION BY MS. MESERVE 10 MS. MESERVE: Good afternoon. Osha Meserve for LAND and Friends of Stone Lakes. 11 12 Just had a few questions for Dr. Denton. 13 Let's see, just first going to Page 9 of your testimony which is -- let's see, 51, please. 14 15 You discuss the "Big Flow" -- or I'm sorry --16 the "Big Sip, Little Gulp" [sic] concept. It might be 17 in your old testimony. 18 WITNESS DENTON: Which line is that on? 19 MS. MESERVE: So we're on Page 25 of your testimony, and you're talking about "Big Sip, Little 20 21 Gulp." And in terms of that concept, you -- it's your 22 opinion that the ability to do a big gulp, little sip 23 is limited by a South of Delta storage, in part? 24 WITNESS DENTON: Yes. 25 MS. MESERVE: What is your understanding of

1 the prospects for increasing South of Delta storage in
2 the time period of the proposed project?

CO-HEARING OFFICER DODUC: Ms. Morris.

MS. MORRIS: I would object as outside the
scope of his rebuttal testimony. It doesn't -- it says
it needs increase. It doesn't have anything about how
or when. Also, speculative.
CO-HEARING OFFICER DODUC: Ms. Meserve, point
me to where his testimony includes discussion of South

10 of Delta storage.

3

11 MS. MESERVE: Perhaps it's implied, but the 12 whole point of a concept that had "Big Sip, Little 13 Gulp," as Dr. Denton described it in his presentation 14 today, would be that the South of Delta storage, you 15 know, could be there. So, I thought that was a --16 CO-HEARING OFFICER DODUC: Can't use an

17 inference to expand the scope.

18 Objection is sustained.

MS. MESERVE: With respect to the -- I think Iput down some wrong page numbers. I'm sorry.

21 With the Rio Vista flow standards that you 22 discuss on Page 8 of your testimony, with respect to 23 the assumptions in the modeling, since you drafted your 24 testimony, is there any new information regarding Rio 25 Vista flows that would change the opinion you've

1 expressed here?

2 CO-HEARING OFFICER DODUC: Hold on, please. 3 MS. MORRIS: Objection, outside the scope. He can't bring in new information since he drafted his 4 5 testimony on cross-examination. It goes beyond his б rebuttal. 7 CO-HEARING OFFICER DODUC: I thought one of the typical questions an attorney would ask their 8 9 client when presenting testimony is, "Do you assert 10 that the testimony you provided is still true?" And if that is correct then, Dr. Denton, do 11 you assert -- is this statement in your testimony still 12 13 true and correct today? WITNESS DENTON: I'm not sure exactly which 14 15 statement. But I was asked earlier by Ms. Morris about 16 did I receive any modeling data. And I did receive some modeling data on -- with and without Rio Vista 17 18 flows from DWR. 19 CO-HEARING OFFICER DODUC: Does your conclusion regarding Rio Vista flows in your rebuttal 20 21 testimony, is it still your -- is it still the truth as 22 you know it today? WITNESS DENTON: Yes, because CWF H3+ still 23 24 contains the January-through-August Rio Vista flows. 25 CO-HEARING OFFICER DODUC: Thank you.

1 MS. MESERVE: And are you aware that DWR 2 witnesses have asserted that all of the criteria, 3 including Rio Vista minimum flow standard, would be 4 subject to adaptive management? 5 WITNESS DENTON: I can't speak expertly on б which ones are in and which are out in that particular 7 question. 8 MS. MESERVE: Going back to your concern about 9 the Rio Vista flow standard, if that standard was to be 10 removed, you would be concerned about water quality implications from that, right? 11 12 WITNESS DENTON: I think it -- there are those 13 four months. And there are issues with what would happen if you take those four months off. 14 15 And I understand that, in one of those months, 16 the Rio Vista standard was 3,000 cfs in CWF H3+. When you took the restriction away, it dropped to -- the Rio 17 18 Vista flow dropped to about 1,860 cubic feet per 19 second, which is very low. So there are impacts there, not -- perhaps on 20 21 reverse flows for fish, et cetera. So it would be nice 22 to have those data to explore in a bit more detail, for 23 the Board to have it. 24 CO-HEARING OFFICER DODUC: Ms. Morris. 25 MS. MORRIS: I'm really sorry. For the

> California Reporting, LLC - (510) 224-4476 www.CaliforniaReporting.com

230

1 record, that question was asked generally about

2 Rio Vista. And there's two different time frames of3 standards.

4 So if Ms. Meserve could ask the question which 5 time frame she's referring to or Dr. Denton could 6 clarify his response, what he is responding to, so that 7 the record is accurate.

8 CO-HEARING OFFICER DODUC: Dr. Denton?
9 WITNESS DENTON: Could I have the question
10 again?

11 MS. MESERVE: Well, I was asking about if you 12 would be concerned if the Rio Vista flow would be 13 changed or removed. And you mentioned four months, and 14 I have the question. Just to clarify, what four months 15 are you talking about?

16 WITNESS DENTON: Oh, you want me to clarify 17 the four months?

18 MS. MESERVE: Yes. Well, I think that's part 19 of what the objection is about.

20 WITNESS DENTON: We could bring up -- I have a 21 table of all the Rio Vista flows, and we could identify 22 which ones they were.

23 CO-HEARING OFFICER DODUC: Hold on.

Ms. Morris, perhaps you could clarify yourobjection.

1 MS. MORRIS: No, I don't mean to -- I'm not 2 objecting. I'm trying to clear the record. 3 So I think the question is September to 4 October. So you need to make that specification because there's different standards at different time 5 б frames, and so the record needs to be clear. So it 7 wasn't really an objection. 8 CO-HEARING OFFICER DODUC: A clarification 9 then. 10 MS. MORRIS: Thank you. CO-HEARING OFFICER DODUC: Do we agree with 11 what Ms. Morris just clarified for the record? 12 WITNESS DENTON: Sorry. What was the question 13 14 again? There's so much back and forth. MS. MESERVE: I think -- let's see. I think 15 16 we're all getting a little tired at the end of this week, unfortunately. 17 18 CO-HEARING OFFICER DODUC: Mr. Berliner. 19 MR. BERLINER: Maybe I can be helpful, at least with Mr. Denton's response. 20 21 He indicated there were four months involved 22 in the standard that he commented on, which, on 23 Line 25, is exactly what his testimony says: September, 24 October, November, December. 25 MS. MESERVE: And in terms of what the second

Rio Vista standard is, I'm going off of DWR-1143 2nd 1 2 Revised. And I only see one mention of the Rio Vista 3 flow in that particular criteria, so I don't know what 4 you want to clarify, Ms. Morris. CO-HEARING OFFICER DODUC: I think it's been 5 б clarified. Let's not muddy it up. 7 MS. MESERVE: Okay. 8 WITNESS DENTON: The days, the months that are 9 written up here are actually referred to in my Exhibit 10 CCC-SC-53 as the -- you know, you can look at that table and see which months are the ones that are 11 12 impacted. 13 MS. MESERVE: And what -- why -- if someone was to say, "Well, it's only four months," why do you 14 think it's still a problem? 15 16 WITNESS DENTON: I think it's just something that needs to be done correctly, that you have the 17 18 opportunity -- or we need to do additional modeling 19 anyway. So we need to make sure that, in the next model run to inform the Board, that that is done 20 21 correctly. 22 There are other things that came up earlier 23 that were discussed at least in DWR-1143 that maybe 24 there's some concerns there, and they need to be

25 corrected as well.

1 And we need to get a model run that does 2 represent how the project will operate, with the right 3 CVP costs share, and with all the other aspects and 4 with adaptive management, et cetera, so we can really 5 assess the project properly. б MS. MESERVE: And when do you think that could 7 occur? 8 WITNESS DENTON: As soon as possible. But it 9 needs to be done before a decision can be made. 10 MS. MESERVE: So that would be your recommendation as a modeling expert, that it should be 11 done before a decision? 12 WITNESS DENTON: Yes, and I think my written 13 testimony has -- you know, each section ends with, "To 14 15 properly inform the Board, we need to do remodel this 16 or do some more modeling." 17 MS. MESERVE: And so are you aware of any 18 current plan to correct or further inform the modeling? 19 WITNESS DENTON: We don't tend to find out about the modeling until submitted as part of the 20 21 testimony from DWR. 22 MS. MESERVE: And then you have discussion of 23 the I and E ratio. And your suggestion is that it 24 should be applied north of -- or above the proposed 25 North Delta Diversions; is that correct?

WITNESS DENTON: Yes, that the North Delta
 intake should be included in the total exports from the
 Delta.

MS. MESERVE: And the current location for
consideration of I and E under current operations is at
Freeport; isn't that correct?

7 WITNESS DENTON: Well, that's part of it. 8 There's all the other tributaries contribute to inflow 9 to the Delta. But the change that is being suggested 10 by the petitioners is that you measure the inflow to 11 the Delta downstream of the North Delta intakes after 12 the water has been taken out.

MS. MESERVE: Are you aware that the ITP which is SWRCB-107 defines the Delta outflow as including the Yolo Bypass water?

16 WITNESS DENTON: Yes.

MS. MESERVE: But the Yolo Bypass water, to the extent it goes down the Yolo Bypass, wouldn't go down the Sacramento River at all, would it?

20 WITNESS DENTON: No.

21 MS. MESERVE: Where would that water rejoin
22 the Sacramento River?

23 WITNESS DENTON: Much further down by Rio24 Vista, closer to.

25 MS. MESERVE: Are you aware that there's a --

1 there's a project review almost complete for

2 implementing the NMFS Biological Opinion requirements 3 to increase flows down the Yolo Bypass? WITNESS DENTON: I'm aware of it, and I have 4 5 read some details about it but not a lot. б MS. MESERVE: And are you aware that the 7 diversions down the Yolo Bypass could be increased up 8 to 12,000 cfs for seven months of the year? 9 CO-HEARING OFFICER DODUC: Ms. Morris. 10 MS. MORRIS: Outside the scope of his rebuttal 11 testimony. He does not talk about anything other than 12 inflow and outflow. And this is going way more into 13 detail about another project that is not California 14 WaterFix. MS. MESERVE: The Yolo Bypass project is 15 16 discussed in the ITP and throughout this. It's a condition on the existing operations, and it's assumed 17 18 to be occurring. And it is in fact occurring, and it 19 used to be part of this project as well. So --CO-HEARING OFFICER DODUC: But it's not part 20 21 of Dr. Denton's rebuttal testimony. 22 Sustained. 23 MS. MESERVE: Dr. Denton is discussing 24 inflow-to-export ratio. And I am discussing with him 25 an additional slug of water that is not assumed to go

1 past, and I'm asking him --

2 CO-HEARING OFFICER DODUC: It's outside the 3 scope of his rebuttal testimony. 4 MS. MESERVE: Rather than make you wait, I 5 shall conclude my cross. Thank you. б CO-HEARING OFFICER DODUC: Mr. Siptroth, do 7 you have redirect? And if so, on what particular 8 topic? 9 MR. SIPTROTH: At this time, I have no 10 redirect. CO-HEARING OFFICER DODUC: For which 11 Dr. Denton and all of us are extremely grateful. 12 13 At this time, does that conclude your 14 rebuttal? 15 MR. SIPTROTH: That does conclude Dr. Denton's 16 rebuttal testimony. 17 CO-HEARING OFFICER DODUC: Would you like to 18 offer your exhibits into the record? MR. SIPTROTH: I would. And I also have one 19 20 follow up question after I do. So at this time, I would like to ask that 21 22 Exhibits CCC-SC-50 through 67, and CCC-SC-56-Errata be 23 moved into the record. 24 CO-HEARING OFFICER DODUC: Are there any 25 objections?

1 (No response)

2 CO-HEARING OFFICER DODUC: Not hearing any,3 those are now in the record.

4	(Protestant Costa County, Contra Costa
5	County Water Agency, and Solano County
б	Exhibits CCC-SC-50 through CCC-SC-67 and
7	CCC-CS-56-Errata admitted into the record)
8	CO-HEARING OFFICER DODUC: And your question,
9	Mr. Siptroth?

10 MR. SIPTROTH: Before his rebuttal -- or as his rebuttal testimony was beginning, Dr. Denton had 11 12 mentioned a correction to CCC-SC-51, to insert the word 13 "not." I would propose to offer CCC-SC-51-Errata and ask that it be moved into the record via a written 14 15 submittal rather than coming back to the hearing for 16 that purpose. 17 CO-HEARING OFFICER DODUC: Why would he need 18 to come back to the hearing? 19 MR. SIPTROTH: I just -- as far as the procedure for offering an errata exhibit, to insert the 20 word that Dr. Denton --21

22 CO-HEARING OFFICER DODUC: Typically minor
23 corrections are made on the record without having to go
24 back.

25 Or do we?

1 MR. SIPTROTH: Is that okay? 2 MR. DEERINGER: No, the Hearing Officer is 3 correct. 4 MR. SIPTROTH: Okay. Wonderful. Thank you. 5 CO-HEARING OFFICER DODUC: Let's not create б extra work for Dr. Denton. 7 MR. SIPTROTH: I appreciate it. Thank you. (Protestant Costa County, Contra Costa 8 9 County Water Agency, and Solano County Exhibit CCC-SC-51-Errata admitted into 10 the record) 11 CO-HEARING OFFICER DODUC: All right. Thank 12 13 you all. We are adjourned. And, again, keep an eye out for an e-mail 14 15 Wednesday afternoon about the status of the hearing on 16 Thursday and Friday of next week. Thank you. 17 (Whereupon, the proceedings recessed 18 at 4:37 p.m.) 19 20 21 22 23 24 25

1 STATE OF CALIFORNIA

2 COUNTY OF MARIN) I, DEBORAH FUQUA, a Certified Shorthand 3 4 Reporter of the State of California, do hereby certify 5 that the foregoing proceedings (Pages 105 through 239) б were reported by me, a disinterested person, and 7 thereafter transcribed under my direction into typewriting and which typewriting is a true and correct 8 9 transcription of said proceedings. 10 I further certify that I am not of counsel or attorney for either or any of the parties in the 11 12 foregoing proceeding and caption named, nor in any way 13 interested in the outcome of the cause named in said caption. 14 15 Dated the 13th day of September, 2018. 16 17 18 DEBORAH FUOUA 19 CSR NO. 12948 20 21 22 23 24 25

))

ss.

```
1 State of California
                         )
                          )
 2 County of Sacramento )
 3
 4
         I, Candace L. Yount, Certified Shorthand Reporter
 5 for the State of California, County of Sacramento, do
 6 hereby certify:
7
         That I was present at the time of the above
 8 proceedings;
 9
         That I took down in machine shorthand notes all
10 proceedings had and testimony given;
11
         That I thereafter transcribed said shorthand notes
```

12 with the aid of a computer;

```
That the above and foregoing is a full, true, and
13
14 correct transcription of said shorthand notes, and a
   full, true and correct transcript of Pages 1 - 104;
15
16
         That I am not a party to the action or related to
17 a party or counsel;
         That I have no financial or other interest in the
18
19 outcome of the action.
20
21 Dated: September 13, 2018
22
23
24
                        Candace L. Yount, CSR No. 2737
25
               California Reporting, LLC - (510) 224-4476
```

```
www.CaliforniaReporting.com
```