1	BEFORE THE				
2	CALIFORNIA STATE WATER RESOURCES CONTROL BOARD				
3					
4	CALIFORNIA WATERFIX WATER)				
5	RIGHT CHANGE PETITION HEARING)				
6	JOE SERNA, JR. BUILDING				
7	CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY				
8	COASTAL HEARING ROOM				
9	1001 I STREET				
10	SECOND FLOOR				
11	SACRAMENTO, CALIFORNIA				
12					
13	PART 2 REBUTTAL				
14					
15	Tuesday, August 15, 2018				
16	9:30 a.m.				
17					
18	Volume 42				
19	Pages 1 - 236				
20					
21					
22	Reported By: Candace Yount, CSR No. 2737, RMR, CCRR				
23	(a.m. session) Deborah Fuqua, CSR No. 12948				
24	(p.m. session)				
25					
l	Utilizing Computer Aided Transcription				

1	APPEARANCES
2	CALIFORNIA WATER RESOURCES BOARD
3	Division of Water Rights
4	Board Members Present:
5	Tam Doduc, Co-Hearing Officer Felicia Marcus, Chair & Co-Hearing Officer Dorene D'Adamo, Board Member
7	Staff Present:
8 9 10	Diane Riddle, Environmental Program Manager Dana Heinrich, Senior Staff Attorney Andrew Deeringer, Senior Staff Attorney Conny Mitterhofer, Supervising Water Resource Control Engineer Jean McCue, Water Resource Control Engineer
12	PART 2
13	For Petitioners:
14	California Department of Water Resources:
15 16	James (Tripp) Mizell Thomas M. Berliner
17	The U.S. Department of the Interior:
18	Amy L. Aufdemberge, Esq.
19	FOR PROTESTANTS AND INTERESTED PARTIES:
20	For State Water Contractors:
21	Stefanie Morris
22 23 24	For San Joaquin Tributaries Authority, The (SJTA), Merced Irrigation District, Modesto Irrigation District, Oakdale Irrigation District, South San Joaquin Irrigation District, Turlock Irrigation District, and City and County of San Francisco:
25	Tim Wasiewski

1	APPEARANCES (Continued)
2	FOR PROTESTANTS AND INTERESTED PARTIES (Continued):
3	For The Environmental Justice Coalition for Water, Islands, Inc., Local Agencies of the North Delta, Bogle
4	Vineyards/Delta Watershed Landowner Coalition, Diablo Vineyards and Brad Lange/Delta Watershed Landowner
5	Coalition, Stillwater Orchards/Delta Watershed Landowner Coalition, Brett G. Baker and Daniel Wilson:
6	<u> </u>
7	Osha Meserve
8	For Sacramento Valley Water Users:
9	Ryan Bezerra
10	For Tehama-Colusa Canal Authority & water service contractors in its service area:
11	Meredith Nikkel
12 13	For California Sportfishing Protection Alliance (CSPA), California Water Impact Network (C-WIN), and AquAlliance:
14	Chris Shutes Michael Jackson
15 16 17	For Central Delta Water Agency, South Delta Water Agency (Delta Agencies), Lafayette Ranch, Heritage Lands Inc., Mark Bachetti Farms and Rudy Mussi Investments L.P.:
18	John Herrick, Esq.
19	For Grassland Water District:
20	Ellen Wehr
21 22	For County of San Joaquin, San Joaquin County Flood Control and Water Conservation District, and Mokelumne River Water and Power Authority:
23	Thomas H. Keeling
24	For California Water Research:
25	Deirdre Des Jardins

1	APPEARANCES (Continued)
2	FOR PROTESTANTS AND INTERESTED PARTIES (Continued):
3	For Westlands Water District and San Luis & Delta-Mendota Water Authority:
4 5	Hans-Peter Walter
6	For The City of Stockton:
7	Kelley Taber
8	
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1	Tuesday, August 15, 2018 9:30 a.m.		
2	PROCEEDINGS		
3	000		
4	CO-HEARING OFFICER DODUC: Good morning,		
5	everyone. It is 9:30. Welcome back to this Water		
6	Right Change Petition hearing for the California		
7	WaterFix.		
8	I'm Tam Doduc. To my right is Board Chair and		
9	Co-Hearing Officer Felicia Marcus, to the Chair's		
10	right, Board Member Dee Dee D'Adamo. To my left are		
11	Andrew Deeringer and Conny Mitterhofer. We are being		
12	assisted by Mr. Hunt.		
13	I see all familiar faces in the room, so I'm		
14	going to skip the first two announcements and focus on,		
15	as always, the most important one.		
16	Please take a moment and put all your		
17	noise-making devices on silent, vibrate, do not		
18	disturb.		
19	All right. Are there any housekeeping matter		
20	that we need to address?		
21	Mr. Wasiewski.		
22	MR. WASIEWSKI: Hi. Tim Wasiewski for the		
23	San Joaquin Tributaries Authority.		
24	I just want to let you know that we are		
25	withdrawing the remainder of our testimony that wasn't		

```
stricken. And I heard that that might -- we might be
1
2
     called today so I wanted to let you know.
              CO-HEARING OFFICER DODUC: So you are not
3
4
    putting on a rebuttal case today.
5
              MR. WASIEWSKI: We are not putting on a Part 2
6
     rebuttal case, correct.
7
              CO-HEARING OFFICER DODUC: Thank you for
     clarifying that.
8
9
              MR. WASIEWSKI: Thank you.
              CO-HEARING OFFICER DODUC: Miss Meserve, that
10
11
     means you're up.
              MS. MESERVE: Good morning.
12
13
                    Based on the way things ended yesterday,
     I understood that our Order of Direct Testimony
14
    Number 8 with Dr. Shilling and Mr. Stokely would be on
15
     Thursday morning.
16
17
              And so I directed Mr. Stokely to begin
     traveling back down here from Oregon, and he will be
18
19
     available, along with Dr. Shilling, on Thursday
20
     morning.
21
              CO-HEARING OFFICER DODUC: I think I'm fine
     with that.
22
23
              MS. MESERVE:
                            Okay.
              CO-HEARING OFFICER DODUC: Unless there are
24
25
     any objection. I think we have all the things that we
```

1	need to discuss as the Hearing Team. And so if we
2	break a little bit earlier today, I don't think anyone
3	will object; okay?
4	MS. MESERVE: Appreciate your flexibility.
5	Thank you.
6	CO-HEARING OFFICER DODUC: All right. Plus, I
7	think you have a motion to file today as well
8	MS. MESERVE: Yes.
9	CO-HEARING OFFICER DODUC: Miss Meserve, if
10	I remember correctly.
11	Okay. In that case, then, we will now
12	turn to Mr. Bezerra and Miss Nikkel for your
13	rebuttal presentation.
14	And I believe both witnesses are familiar
15	hands and have already taken the oath; right?
16	MR. BEZERRA: Yeah, I believe so.
17	CO-HEARING OFFICER DODUC: All right. With
18	that, then, you may begin.
19	MR. BEZERRA: Thank you.
20	
21	
22	
23	
24	
25	

1	Walter Bourez
2	and
3	Shankar Parvathinathan,
4	called as witnesses by the Sacramento
5	Valley Water Users, having previously
6	been duly sworn, were examined and
7	testified further as follows:
8	DIRECT EXAMINATION BY
9	MR. BEZERRA: Could the witnesses please state
10	their name for the record.
11	WITNESS BOUREZ: Walter Bourez.
12	MR. BEZERRA: And could you just please I'm
13	sorry.
14	WITNESS PARVATHINATHAN: Shankar
15	Parvathinathan.
16	MR. BEZERRA: And just to confirm that you
17	both have taking the oath in this hearing; correct?
18	WITNESS BOUREZ: Yes, I have.
19	WITNESS PARVATHINATHAN: Yes, I have.
20	MR. BEZERRA: Mr. Bourez, is Exhibit SVWU-400
21	your testimony?
22	WITNESS BOUREZ: Yes, it is.
23	MR. BEZERRA: Have you previously submitted
24	your Statement of Qualifications in this hearing?
25	WITNESS BOUREZ: .

```
1
              MR. BEZERRA: Do you rely on Exhibits
2
     SVWU-402, SVWU-404 and SVWU-405 in presenting your
     testimony in this Part 2 rebuttal?
3
4
              WITNESS BOUREZ:
                               Yes, I did.
              MR. BEZERRA: Does Exhibit SVWU-403 summarize
5
     your testimony in Exhibit SVWU-400?
6
7
              WITNESS PARVATHINATHAN: Yes, it does.
              MR. BEZERRA: Dr. Parvathinathan, is Exhibit
8
     SVWU-401 your testimony?
9
              WITNESS PARVATHINATHAN: Yes, it is.
10
              MR. BEZERRA: Have you previously submitted
11
     your Statement of Qualifications in this hearing?
12
13
              WITNESS PARVATHINATHAN: Yes, I did.
              MR. BEZERRA:
                            Thank you.
14
15
              WITNESS PARVATHINATHAN: And I did again.
              MR. BEZERRA: And -- I'm sorry -- could you
16
     repeat that?
17
              WITNESS PARVATHINATHAN: I think I did it
18
19
     again.
20
              MR. BEZERRA: You have a Statement of
21
     Qualifications in SVWU-401?
22
              WITNESS PARVATHINATHAN:
                                       Yes.
23
              MR. BEZERRA:
                            Thank you.
              Do you rely on Exhibits SVWU-402, SVWU-404 and
24
25
     SVWU-405 in presenting your testimony?
```

```
1
              WITNESS PARVATHINATHAN:
                                       Yes.
2
              MR. BEZERRA: Does Exhibit SVWU-403 summarize
     that testimony?
3
4
              WITNESS PARVATHINATHAN:
                                       Yes.
              MR. BEZERRA: Could we please pull up Exhibit
5
     SVWU-403, please.
6
7
              (Exhibit displayed on screen.)
              MR. BEZERRA: And beginning with Mr. Bourez,
8
9
     could the two of you please summarize your testimony,
10
    please.
              WITNESS BOUREZ: Yes. If we could go to
11
12
     Page 2, please.
13
              (Exhibit displayed on screen.)
              WITNESS BOUREZ: Our testimony consists of
14
15
     four topics. And the first topic I will present is
     modeling issues identified in Part 1 that persist in
16
17
     the DWR/USBR California WaterFix H3+ modeling.
              Dr. Shankar, as we like to call him, will talk
18
     about March Delta Outflow Criteria in the H3+ modeling,
19
20
     as well as the Spring Outflow Criteria in the
     Incidental Take Permit.
21
22
              Lastly, I will present the effects of State
     Water Resources Control Board 2010 Delta Outflow
23
     Criteria Report if it were included as a Permit term in
24
25
     the California WaterFix.
```

Please go to the next slide.

(Exhibit displayed on screen.)

WITNESS BOUREZ: The key findings in our review of the H3+ modeling is, like Part 1 of the DWR/USBR BA modeling, the H3+ model does not consider additional capacity that would be made available by the North Delta diversion when modeling allocations to South-of-Delta CVP and SWP Contractors.

This artificially and unrealistically limits the modelability of the California WaterFix to increase South-of-Delta allocations. And this affects systemwide operations for the Central Valley Project and State Water Project.

Second, like Part 1 of the BA modeling, the H3+ model includes artificial limits on the use of Joint Point of Diversion.

Third, like Part 1 BA modeling, the H3+ model changes the North-of-Delta/South Delta reservoir balancing criteria. So less water stored -- Less stored water is modeled.

THE WITNESS: As being conveyed from North

Delta reservoirs to South Delta reservoirs, San Luis.

This artificially and incorrectly keeps model storage North of the Delta higher in the H3+ modeling compared to the No-Action Alternative.

Fourth, CalSim II does not address effects to many types of water users.

Items 1, 2 and 3 are discretionary operating criteria that are used to balance the model and operate the model, to make allocations and balance reservoirs.

And there's many different discretionary actions that can be taken to change the operations, and those change in operations have -- result in different effects systemwide.

So, overall, our opinion is that the modeling does not provide sufficient information to understand how the California WaterFix may affect systemwide operations.

Next slide, please.

(Exhibit displayed on screen.)

WITNESS PARVATHINATHAN: Thank you. Good morning, everyone.

This slide represents information on the March Delta Outflow Criteria included in the CWF H3+ model.

And there's some specific area are summarized from Petitioners' own modeling.

The table here, I would like to explain.

The first column in this table presents the years in which the March outflow criteria is not met, even after reducing exports to obtain cfs.

1 The second column presents the outflow target 2 included in the CWF H3+ model. And the third column presents the simulated 3 outflows, Delta outflow. 4 And the fourth column, simulated total 5 6 exports. 7 And the last column is a calculation that shows the deficit, or the additional water type that 8 9 would be needed to meet the targets in those years when the target is not met. 10 So any additional actions that may be taken to 11 meet that target or to satisfy the deficit would result 12 13 in impacts to North-of-Delta storages. Next slide, please. 14 15 (Exhibit displayed on screen.) This slide summarizes WITNESS PARVATHINATHAN: 16 17 Spring Delta Outflow Criteria included in the 18 Incidental Take Permit for the CWF. The Delta Outflow Criteria and the Incidental 19 20 Take Permits are different than those in the ITP 21 Application and analyzed in the CWF H3+. 22 And the CWF Proponents have not analyzed Delta outflow criteria in the ITP. 23 And DWR witnesses have testified that ITP 24

Delta Outflow Criteria and ITP Application Criteria

1 result in substantially the same Delta outflow. 2 Next slide, please. (Exhibit displayed on screen.) 3 4 WITNESS PARVATHINATHAN: So, M -- MBK was 5 given the objective of investigating what could be the effects of meeting the ITP criteria. So MBK performed 6 7 a simplified analysis to estimate how often the target -- ITP target is met in the H3+ modeling. 8 9 So we calculated outflow target based on Sub Table B of the Incidental Take Permit, which 10 specifies outflow target in Florex (phonetic) and cfs 11 and as a function of the Eight River Index. 12 13 And we processed outputs from the CWF H3+ modeling and compared the outputs of simulated outflow 14 15 against the target in the Incidental Take Permit. a simple mathematical calculations, just to see how the 16 17 targets in ITP are not -- are met in the CWF H3+ modeling. 18 In conclusion, the Incidental Take Permit 19 20 Delta outflow target is met less frequently than the 21 outflow target from the ITP Application in March, and the Delta outflow deficit is greater with the 22 Incidental Take Permit targets. 23 24 The last point: April and May show even 25 greater deficits than March.

1 Thank you. 2 WITNESS BOUREZ: May we have the next slide, 3 please. 4 (Exhibit displayed on screen.) WITNESS BOUREZ: So our fourth and final topic 5 in our testimony is addressing the effects that 2010 6 7 Delta Flow Criteria Report would have on the system if the criteria was adopted as a permit term. 8 So this slide demonstrates a modeled Delta 9 outflow compared to unimpaired Delta outflow. 10 And when we take the ratio of model to 11 unimpaired, on an annual average, basically 53 percent 12 of the time . . . for the ratio is 53 percent on an 13 annual average basis. 14 So the red line on that chart, which -- Let me 15 explain the chart in a little bit more detail. 16 17 It's average monthly unimpaired Delta outflow on the X-Axis. The Y-Axis is the percent of Delta 18 19 outflow of that unimpaired flow. 20 So if -- if unimpaired flow is equal to 21 outflow, it would be a one. If Delta outflow was half of unimpaired flow, it would be on that red line, and 22 23 some of the points fall on that red line.

Inside the circles on that chart are the water

year-type. And essentially the wetter types of years

24

are above 50 percent unimpaired flow, while more of the dry, critical and below-normal years are less than 50 percent of Delta -- unimpaired Delta outflow.

So by imposing a 50 percent unimpaired flow requirement, we're affecting more of the dry and critical years than we are the wetter types of years. So, in the dry and critical years, there would be an increase in Delta outflow requirement.

Next slide, please.

(Exhibit displayed on screen.)

WITNESS BOUREZ: When we modeled this in CalSim in 2011, we found that a 50 percent unimpaired flow criteria from January through June would increase Delta outflow roughly a million acre-feet. The model came up with 1,057,000 on an annual average basis.

And one of the things that we found created the largest impacts were the critical year increase of about a million acre-feet Delta outflow.

And when we start thinking about critical years like we had in 2014 and 2015, years that we could not meet existing D-1641 standards, an additional outflow requirement could also not be met.

So it -- It's a . . . additional flow requirement in years when we cannot always meet standards as is, and an additional flow requirement

would be very difficult to meet.

The other thing with the unimpaired flow from January through June is, those are the times that were building up coldwater pool in our reservoirs, and there are no ag diversions -- agricultural diversions at that time to cut.

So, even if we were to reduce agricultural diversions upstream to meet that, we would rely on our reservoirs to put that water into the Delta, and that would prevent us from building up our coldwater pool that's necessary for listed species upstream for the summertime.

In addition to that Delta outflow and flow changes in the system, the -- the Sacramento Valley would rely more on groundwater pumping to meet the needs of the system.

And we know that a quarter million acre-feet of additional pumping would be difficult to meet, or impossible. And in critical years, the need for additional water is roughly a million acre-feet in average and critical years.

In addition to those effects of the system operations, South-of-Delta exports went down roughly 700,000 acre-feet on an annual average basis. And this effect to the system could cause the Projects to be

```
1
     non-viable, particularly the CVP.
                                        That reduction in
2
     the delivery for a system that's already having
     economic difficulty repaying the Projects, would --
3
4
     would really -- it could push it over the edge.
5
              Please turn to the next slide.
              (Exhibit displayed on screen.)
6
7
              WITNESS BOUREZ: When we looked at reservoir
     storages in this model run, we found that Trinity,
8
9
     Shasta and Folsom hit dead pool approximately
     20 percent of the time due to the 50 percent flow
10
     criteria. And in some cases, we had consecutive years,
11
     three to four years, where Shasta hit dead pool.
12
13
              When we look at some of the return on Salmon,
     my understanding is that three years is a return
14
15
    period.
              And if we had lost three years in a row
    because of dead pool or bad temperatures, that would be
16
17
     a real issue.
              And when we looked at the modeling in
18
19
     consecutive droughts, we were hitting dead pool in
20
     consecutive years.
21
              So it makes it very difficult to manage for
     cold water pool and upstream habitat.
22
23
              Next slide, please.
              (Exhibit displayed on screen.)
24
25
              WITNESS BOUREZ: So the conclusions of the
```

```
1
     modeling is that we saw that the CVP and SWP had
2
     difficulty with viable operations. We saw regular
     violations of existing D-1641 standards in the Delta,
3
4
     and as well as upstream standards.
              We saw an average annual decrease in carryover
5
    percent of unimpaired flow of about 2 million acre-feet
6
7
     in CVP reservoirs and SWP upstream reservoirs, and
     about a million acre-feet in the 40 percent unimpaired
8
9
     outflow requirements.
              And, again, we saw violations of existing
10
     standards, and those were flow standards in the
11
     Sacramento River and American River and -- and in the
12
13
     Delta, and we had severe water supply impacts.
              That concludes a summary of our testimony.
14
15
              MR. BEZERRA: We're ready for cross.
              CO-HEARING OFFICER DODUC: All right.
16
17
     you.
              I see more people here today than there were
18
19
     yesterday, so let me confirm.
20
              I -- At least the request I received yesterday
21
     for cross-examination was: For the Department for 10
     minutes; State Water Contractors for 10;
22
    Miss Des Jardins for 45; and Grassland for 15.
23
24
              Are there any other?
25
              If you could help me out by giving me your
```

```
group number, that would be helpful.
1
2
              MR. SHUTES: Chris Shutes CSPA, Group
    Number 31.
3
4
              I have maybe 45 minutes for this panel.
5
              CO-HEARING OFFICER DODUC: Okay.
              MR. HERRICK: John Herrick for the South Delta
6
7
    parties, Group 21.
              You know, maybe 10, 15 minutes.
8
              CO-HEARING OFFICER DODUC:
9
                                        10 to 15?
              MR. HERRICK: Yes, ma'am.
10
              MR. WASIEWSKI:
                              Tim Wasiewski for the
11
     San Joaquin Tributaries Authority, Group 18.
12
13
              About 10 minutes.
              CO-HEARING OFFICER DODUC: All right. We will
14
15
     once again go in order of Group Number.
              A heads-up to everyone that, before we break
16
17
     today, I'm going to want to go through at least the
     next -- I don't know -- five or six parties in terms of
18
19
    presenting rebuttal and get estimates for rebuttal time
20
     as well as cross-examination time so that we can sort
21
     of tentatively plan out the remainder of this week.
              So, with that, Mr. Mizell, Miss Morris.
22
                                                        Is
23
     this a joint cross?
24
              MR. MIZELL:
                           Yes.
                                 Last night, we were able to
25
     find some efficiencies and I think we can do a joint
```

```
cross in 15.
1
2
              CO-HEARING OFFICER DODUC: Okay.
              MS. MORRIS: Good morning.
3
4
              Most of my questions -- Or all of my questions
5
     are for Mr. Bourez, and they're largely related to his
     opinion about the unimpaired flow requirement on
6
7
     CVP/SWP operations for his last opinion.
                       CROSS-EXAMINATION BY
8
9
              MS. MORRIS: Good morning, Mr. Bourez.
                                                       How
10
     are you?
                               Super good and getting better
11
              WITNESS BOUREZ:
     all the time. How are you?
12
13
              MS. MORRIS: Very good. I see the light at
     the end of the tunnel.
14
              In your rebuttal testimony, you discussed
15
    potential effects of 50 percent unimpaired flow
16
17
     requirements on CVP and SWP operations; correct?
              WITNESS BOUREZ:
                               That's correct.
18
19
              MS. MORRIS: And that testimony, or opinion,
20
     is largely based on what's been marked as SVWU-404,
21
     which was a submittal on the Workshop Number 1
22
     Ecosystem Changes and Slow Salinity Zone submitted by
    yourself; correct?
23
24
              WITNESS BOUREZ:
                               That's correct.
25
              MS. MORRIS:
                           Thank you.
```

```
In looking at that document, SVWU-404, on
1
2
     Page 11.
              MR. BEZERRA: Just a brief -- I think Mr. Hunt
3
4
     saw it, but if we could pull that up, that would be
5
     great.
              (Exhibit displayed on screen.)
6
7
              MS. MORRIS: Your Opinion Number 21 -- 20, you
     state there are (reading):
8
9
              ". . . regulatory requirements for
              streamflows in the Sacramento Valley's
10
              major river systems (sic) to improve
11
              conditions for Salmon and Steelhead."
12
13
              Correct?
14
              WITNESS BOUREZ:
                               That's correct.
15
              MS. MORRIS: Moving on:
              In your Opinion Number 21, you state
16
17
     (reading):
                   "These . . . requirements . . ."
18
19
              And you're referring back to the one, two,
20
     three, four bullet points in Opinion 20.
21
                   ". . . provide appropriate
22
              downstream water temperatures to support
              Chinook Salmon and Steelhead."
23
24
              Correct?
25
              WITNESS BOUREZ:
                               That's correct.
```

So, if I understand you 1 MS. MORRIS: 2 correctly, you're saying the requirements listed above those four bullet points provide protection for Chinook 3 4 Salmon and Steelhead on each tributary; correct? 5 WITNESS BOUREZ: That's correct. MS. MORRIS: Did the Petitioners include the 6 7 requirements listed on Page 11 of your opinion of SVWU-404 in the No-Action Alternative and CWF H3+ 8 9 modeling? MR. BEZERRA: I'm going to object as compound. 10 We've got four different rivers here. 11 CO-HEARING OFFICER DODUC: Mr. Bourez can take 12 13 them one at a time in his answer. 14 WITNESS BOUREZ: Yes, I can. So I'll start with the Sacramento River, and the . . . 15 In CalSim, it's difficult to put temperature 16 17 operating criteria into the model, and we do that through reservoir balancing rules. 18 19 And in the Petitioners' No-Action Alternative, 20 that criteria does get violated because of the nature 21 of CalSim in the -- in the balancing. It goes to dead 22 pool. We're not meeting that. 23 So, although there are criteria in the models to try to meet that, it's not fully satisfied in the 24 25 dry periods.

1 But there are periods --2 CO-HEARING OFFICER DODUC: Hold on. That wasn't her question. 3 Go ahead, Miss Morris. Please repeat your 4 5 question. 6 MS. MORRIS: Thank you. 7 And if it's better, why don't we just say -let's ask for -- I'm really asking about whether or not 8 the modeling include -- for CWF H3+ and NAA includes 9 the four things that you have listed in Opinion 20 of 10 SV-404 (sic), the requirements. 11 CO-HEARING OFFICER DODUC: So, Miss Morris, 12 13 you are not asking whether or not the model result shows compliance with those. You're just asking 14 15 whether or not they are included in the modeling. MS. MORRIS: That's correct. 16 17 WITNESS BOUREZ: I would say that they're included, and the -- for each tributary. 18 19 However, the Sacramento River, it's not that 20 90-5 and 91-1 is not explicitly included in the model, 21 although I believe they tried to meet it in the model. 22 MS. MORRIS: Right. 23 And, in fact, in the modeling you presented in this proceeding, you do a similar type of thing because 24 25 your modeling does not actually have the exact

```
criteria; correct?
1
2
              WITNESS BOUREZ:
                               That's correct.
              MS. MORRIS:
                           Thank you.
3
              For the American River, you listed the flow
4
5
     management standard as incorporated in the 2009 NMFS
6
     bop as a regulatory requirement.
7
              Does the American River flow management
     standard you have in Opinion 20 on Page 11 of SVWU-404
8
9
     include a carryover storage requirement for Folsom?
              WITNESS BOUREZ:
                               It does not. And if I may
10
                  This was modeling done in 2011 --
11
     just remind:
              MS. MORRIS:
                           Right.
12
13
              WITNESS BOUREZ: -- so it was before any of
     that was conceived.
14
                           Actually, my question was about
15
              MS. MORRIS:
     what the standard was. And you have the Water
16
17
     Forum-governed flow management as incorporated in the
     2009 NFMS Biological Opinion.
18
19
              And my --
20
              WITNESS BOUREZ:
                               That's correct.
21
              MS. MORRIS:
                           My --
              WITNESS BOUREZ: That's correct.
22
23
              MS. MORRIS: Okay. But that standard you've
24
     listed here doesn't include any carryover storage
25
     target at Folsom; correct?
```

1 WITNESS BOUREZ: That's correct. 2 MS. MORRIS: If a carryover storage 3 requirement for Folsom were part of a flow management 4 standard, is there a potential for redirected impacts 5 of other Sacramento Valley reservoirs? MR. BEZERRA: Objection: Vague and ambiguous 6 7 as to what she means by "redirected impacts." CO-HEARING OFFICER DODUC: Mr. Bourez, did you 8 9 have a chance to review other testimony submitted in this rebuttal phase and a discussion with respect to 10 redirected impacts? 11 WITNESS BOUREZ: I have not been involved with 12 13 My colleague, Lee Burgfeld, has been involved with that and I've stayed away from it, so I have not 14 evaluated it. 15 CO-HEARING OFFICER DODUC: And so you're not 16 17 familiar with the term "redirected impacts"? WITNESS BOUREZ: I'm familiar with the term 18 19 "redirected impacts." And I have not as part of this 20 hearing evaluated the testimony submitted by the 21 American River Group for the carryover alternative. 22 I think that any criteria has an effect on the 23 system, and whether that's a redirected impact or a 24 change in operations, I -- I can't comment on that. 25 MS. MORRIS: Let me just ask a question, then,

```
to be specific about reservoir storage, or water supply
1
2
     deliveries, because you speak -- you speak to those
     directly in your Opinion Number 9.
3
4
              If there were to be a carryover storage
5
     requirement for Folsom as part of the flow management
     standard, is there a potential for impact to other
6
7
     Sacramento Valley reservoirs?
              MR. BEZERRA: And, again, vague and ambiguous.
8
              We're talking about a WaterFix hearing here.
9
     Mr. Bourez's testifying about WaterFix and the --
10
              CO-HEARING OFFICER DODUC: He's testifying
11
     about flow criteria, and flow criteria that might be
12
13
     considered by us.
              And he's talking specifically about the 2010
14
     Flow Criteria Report, so there is a flow component that
15
     he was focusing on.
16
17
              MS. MORRIS:
                           In addition, key references to --
              MR. BEZERRA:
                            If we could --
18
19
              CO-HEARING OFFICER DODUC: One at a time.
20
              Miss Morris.
21
              MS. MORRIS:
                           Thank you.
              In addition, he references CSPA-202-Errata in
22
23
     its entirety as part of his Opinion 9, which has
24
     specific carryover storage requirements at Folsom.
25
     That's why I'm asking.
```

1 CO-HEARING OFFICER DODUC: All right. 2 Overruled, Mr. Bezerra. WITNESS BOUREZ: That's a -- That's a tough 3 4 question, because it depends on how Reclamation 5 operates the Projects and, you know, whether there's 6 going to be impacts to Delta flows, to exports, to 7 balancing of reservoirs. And there's always a potential for changes to 8 all of the entire system operation, including other 9 reservoirs. 10 So, I just want to be sure I'm 11 MS. MORRIS: understanding, because my question wasn't about other 12 13 impacts. I was going to do that one by one. But I think what you're saying is a more 14 holistic answer, that there would be potential impacts. 15 You just don't know if it would be to reservoir 16 17 storage, water supply deliveries, meeting Delta flow standards. That's what I'm hearing from your answer. 18 19 Is that a correct summary? 20 WITNESS BOUREZ: Almost. I would say -- I 21 can't say whether there would be impacts. There would 22 be changes in operations. I -- I'm not going to judge 23 whether that would impact anybody or anything. 24 But any time you have one change in the 25 system, the whole chain -- the system's highly

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integrated, and whole thing changes. So there is a
1
2
    potential that there's going to be a change in
3
     operations.
4
              MS. MORRIS:
                           Could those potential changes in
5
     operations have impacts to senior -- deliveries to
     senior water rights holders in Sacramento Valley?
6
7
              WITNESS BOUREZ:
                               I don't know.
                     (Pause in proceedings.)
8
9
              MS. MORRIS: Can you answer my question
     regarding potential impacts to senior water rights
10
     holders in the Sacramento valley based on carryover
11
     storage targets at Folsom in a hypothetical situation?
12
13
              CO-HEARING OFFICER DODUC: Miss Morris, would
     you mind changing the word "impact" to "change" or are
14
15
     you --
              MS. MORRIS:
16
                           Sure.
17
              If you could discuss the potential changes.
              MR. BEZERRA: I'm going to object for multiple
18
19
     reasons:
20
              One, I believe, it's asked and answered.
21
     just answered the question.
22
              Second, it's vague and ambiguous as to who the
23
     senior water right holders are.
              CO-HEARING OFFICER DODUC: Miss Morris, would
24
25
     you like to clarify some more?
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1
              MS. MORRIS:
                           Sure.
2
              Mr. Bourez, when I say "Sacramento Valley
     senior water right holders, " do you know what I'm
3
4
     talking about?
5
              WITNESS BOUREZ:
                               There's -- There's a lot of
     senior water right holders within the Sacramento
6
7
              There's other river Settlement Contractors.
     Valley.
     There's pre-'14 water rights holders throughout the
8
9
     valley.
              There's Sacramento settlement contractors.
              MS. MORRIS: Great. Let's start with
10
     Sacramento Settlement Contractors.
11
              And answer the hypothetical question in
12
13
     regards to potential changes to Sacramento Settlement
     Contractor water deliveries if there were carryover
14
15
     storage target requirements at Folsom.
              MR. BEZERRA: I'm going to object as to an
16
17
     incomplete hypothetical.
              I don't understand what the hypothetical is
18
19
     other than just simply implementing the modified FPS.
20
              CO-HEARING OFFICER DODUC: Well, the question
21
     is whether Mr. Bourez understands it and whether he's
     able to answer.
22
23
              With all due respect, Mr. Bezerra.
24
              WITNESS BOUREZ:
                               It -- It's -- It's -- It
25
     depends on so many things, so -- And I apologize for a
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long-winded answer, but I have to explain . . . my conclusion.

If we had higher storage required in Folsom, the system operation systemwide would change. And that would also affect Oroville. It would affect ability to meet flows in the Delta. It would affect Delta exports. It could affect Shasta and Trinity and the Shasta/Folsom balance.

And whether that would affect the Sac River settlement contracts is going to depend on how the Bureau operates. It -- It could have -- It's -- It's possible that it could have effects to flows in the Sacramento River. And whether that trickled down to a change in the Sac River settlement contract diversions, I can't answer that question.

MS. MORRIS: But you agree that changing a carryover storage requirement at Folsom could potentially cause changes on a number of issue -- on a number of system operations, including Delta exports?

MR. BEZERRA: Objection: Asked and answered.

He just stated he couldn't tell you that.

CO-HEARING OFFICER DODUC: Actually, that's not the answer I thought I heard from Mr. Bourez, so perhaps you would clarify.

WITNESS BOUREZ: It would -- It could -- has a

potential to change the system operations, including 1 2 exports, Delta flow, balancing of reservoirs. It could change just the timing from one month to the next and 3 not affect it on an annual basis. 4 5 So, I have not personally evaluated in detail the carryover alternatives, so I couldn't answer 6 7 details about what specifically would be changed. MS. MORRIS: And just to sort of shortcut 8 this: 9 Is it true that similar types of changes could 10 occur in the system if there were carryover storage 11 requirements at Trinity Reservoir? 12 13 MR. BEZERRA: I'm going to object as vague and ambiguous as to what a carryover standard is. 14 For instance, the Modified Flow Management 15 Standard is a highly detailed set of proposed terms and 16 17 conditions. Simply stating "carryover storage" tells you 18 19 very little of what the proposal is. So the answer is 20 vague -- The question is vague and ambiguous. 21 MS. MORRIS: I'm not --CO-HEARING OFFICER DODUC: Hold on. 22 23 The question is very much in line with her 24 previous question. 25 So, did you intend to change any aspect of

your question?

MS. MORRIS: Other than I said Trinity
Reservoir, which doesn't have anything to do with the modified flow standard. And throughout this entire questioning, I've been talking about just carryover storage, not the modified flow standard.

CO-HEARING OFFICER DODUC: Overruled.

WITNESS BOUREZ: So if there was a higher carryover requirement in Trinity Reservoir, I would anticipate that the imports from the Trinity River system into the south would be affected by that, which would affect Shasta and, in turn, would affect the Shasta/Folsom balance, and could affect exports and ability to meet Delta flow criterias.

MS. MORRIS: Same question in regards to, if there were to be any carryover storage requirement at Oroville reservoir, would you expect to see the same kind of changes in the system?

WITNESS BOUREZ: The Oroville carryover, I think, would have a different effect than the carryover target at Trinity, because the Central Valley Project balances Trinity, Shasta and Folsom to meet CVP obligations while DWR operates Oroville in balance with -- It's their only main upstream reservoir, so it would affect the balance between State -- San Luis and

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Oroville and State Water Project operations.
1
2
     think it would have a different effect on the system as
     a whole.
3
4
              MS. MORRIS:
                           I have no further questions.
5
     Thank you.
              CO-HEARING OFFICER DODUC:
6
                                         Thank you,
7
    Miss Morris, Mr. Mizell.
              Mr. Wasiewski, you're up.
8
9
              MR. WASIEWSKI: Good morning. Tim Wasiewski
     for the San Joaquin Tributaries Authority.
10
              This will be in regards to the Delta Flow
11
     Criteria Report, and these are just for Mr. Bourez.
12
13
              If we can go to SVWU-403, and you can go to
     Page 8.
14
              (Exhibit displayed on screen.)
15
                       CROSS-EXAMINATION BY
16
17
              MR. WASIEWSKI: So, Mr. Bourez, this graph
     shows Delta outflow at -- did you say 50 percent
18
19
     unimpaired flow?
                               The red line is a 50 percent
20
              WITNESS BOUREZ:
21
     unimpaired flow line.
              So, if Delta outflow for the months of January
22
23
     through June is 50 percent of unimpaired flow, it would
     fall on that red line.
24
25
              MR. WASIEWSKI: Okay. So which -- Which
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rivers or which tributary -- I -- Which tributaries did 1 2 you assume would be contributing 50 percent unimpaired impaired flow in this calculation? 3 WITNESS BOUREZ: 4 That's a good question. The San Joaquin River we left as a baseline, 5 did not affect it in this model run, so --6 7 MR. WASIEWSKI: Well, let me just stop you there because that's what I'm most concerned about. 8 9 What -- What do you mean you left it a.m. Did you leave it at D-1641 or did you use a 10 loan. percentage of unimpaired flow? 11 WITNESS BOUREZ: Neither because 1641 is not 12 13 met in the San Joaquin River at Vernalis. It's the existing conditions. 14 15 And this was eight years ago so I can't remember. We may have had vamp in that model run at 16 17 the time, and since then, vamp has been removed. So we'll left San Joaquin Tributaries. 18 19 model is equal to the existing conditions, and it's 20 consistent in the with and without unimpaired flow. 21 MR. WASIEWSKI: And so when you did this Delta outflow calculation, though, you needed to include at 22 23 least some flow, or you need to consider at least some 24 flow from the San Joaquin in order to do the equation; 25 right?

1 WITNESS BOUREZ: That's correct. 2 And if my memory serves right, it's about an annual average of 3 million acre-feet is the average 3 4 annual San Joaquin River flow at Vernalis in the model 5 runs, and that contributes to Delta outflow. MR. WASIEWSKI: Okay. That's all I have. 6 7 Thank you. CO-HEARING OFFICER DODUC: 8 Thank you. Mr. Herrick. 9 MR. HERRICK: Thank you, Madam Chair, Chair 10 Marcus and Board Member D'Adamo. 11 John Herrick for the South Delta Water --12 13 Delta Water Agency and other parties. I'd like a quick intro, please, that --14 because Mr. Bourez also, and Dr. Shankar also, talk 15 about the 2010 Report. 16 17 I think, to be consistent with the motions yesterday, I would just make a motion that, depending 18 19 on how you decide with the with DWR witnesses, that 20 should it also apply to this testimony, too, the 21 portion that deals with the flow reports. So . . . CO-HEARING OFFICER DODUC: Hold on. 22 The 23 motion as I understood it yesterday was very specific

to -- at least the argument made was that the citation

of case in chief testimony to which those witnesses

24

were rebutting was improperly either cited or 1 2 interpreted. MR. HERRICK: Correct. 3 4 CO-HEARING OFFICER DODUC: Are you making the 5 same allegation with respect to Mr. -- to these 6 witnesses' testimony. 7 MR. HERRICK: Yes. No offense to the witnesses, but their references to -- the references to 8 9 references in the report is the same thing. There's no citations to people's discussion or valuation of those 10 I believe it's the same situation. 11 reports. CO-HEARING OFFICER DODUC: Miss Nikkel. 12 MS. NIKKEL: Yeah, if I could respond. 13 CO-HEARING OFFICER DODUC: Please. 14 I think we can -- I think we 15 MS. NIKKEL: could probably resolve this now without additional 16 17 briefing. In particular, the testimony offered here does 18 19 include citations to specific testimony that it's 20 rebutting, and that testimony is in paragraph -- I 21 think it was four of Mr. Bourez's testimony. Sorry. 22 Nine of Mr. Bourez's testimony. And 23 specifically the rebuttal is appropriate under this -the Hearing Officers' November 8th, 2017, ruling, which 24 25 specifically provides that rebuttal is the appropriate

time to present evidence of potential injury to legal users from a term or condition presented in another party's case in chief in Part 2.

And, in particular, the testimony offered in NRDC-58 errata at Page 42 proposed a term and condition that would require 67 to 75 percent of unimpaired flows in December through June as a permit condition on the Permits that are being considered.

So this is clearly appropriate testimony. We can walk through the other citations if that would be helpful for the Hearing Officers right now.

CO-HEARING OFFICER DODUC: Your response,
Mr. Herrick.

MR. HERRICK: I recognize that. I don't believe the citations are different than the citations the motion's being relied upon.

But the important thing for me is that, as long as the Board is aware of it and makes an appropriate decision, is, we're embarking upon a -- it seems a partial evidentiary hearing on flow criteria, Flow Criteria Report. A partial one.

Now, I don't know if we're going to have surrebuttal, but if this some of this testimony comes in, then people are going to be demanding surrebuttal on that issue.

But then after this process is done, we're going to move into a nonevidentiary quasi-legislative process in the Bay-Delta hearings dealing with the flows, the necessary flows for various parties or -- necessary flows for the Water Quality Control Plan that eventually assigned to parties.

So, I've been struggling with this and I'm not sure what the legal problem is, but it strikes me as something we'd want to avoid, which is a partial evidentiary hearing on things to be considered at the quasi-legislative process because there will be a whole lot of parties that will say, "Well, I didn't know, and I wasn't able to cross-examine or put on expert witnesses."

When we get two the legislative process, people aren't under oath. People are just submitting documents and they're making presentations to argument, so I would just caution the Board. I think we're tippy-toeing towards a potential cliff.

CO-HEARING OFFICER DODUC: Good imagery,
Mr. Herrick.

MR. HERRICK: Giving it my best.

CO-HEARING OFFICER DODUC: Miss Morris.

MS. MORRIS: Just briefly on this issue.

I wanted to respond to Mr. Herrick's

allegation about tippy-toeing around the issue.

I really don't think that's appropriate for his motion to strike this testimony. I agree with Miss Nikkel that it's is clear it was in the scope of rebuttal because these conditions for flow carryover, we -- They were part of permit conditions. And the Board clearly in their ruling said that folks could reply to permit conditions and explain impacts, and that's exactly what Mr. Bourez's testimony is intended to do.

CO-HEARING OFFICER DODUC: All right.

f: Well, I don't need to tippy-toe around. I apologize.

I'm not trying to undermine other people's motions, but if Mr. Bourez's citations are sufficient to let, in then that's sufficient to let in other people's, regardless of whether they made the proper citation. We've done that before by finding some, you know, verbal cross-examination.

No, they didn't say that that was the reason, so . . .

I'm just warning -- not warning. I'm just bringing the issue up. I think there's a potential for inconsistency and, you know, then we'll all be scratching heads later about how we handle that.

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I've just made the motion. If everybody
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2
     thinks it's ridiculous, you can deny it, but I just
     thought I'd go on the record.
3
              CO-HEARING OFFICER DODUC: And so, for the
4
5
     record, the motion is to strike sections of these
     witnesses' testimony pertaining to the Delta Flow
6
7
     Criteria Report because . . .
              On what grounds? I need a ground here.
8
9
              MR. HERRICK: The ground is, it's -- it's not
     responsive to case in chief testimony or other
10
     appropriate bases for rebuttal.
11
              CO-HEARING OFFICER DODUC: We will take that
12
     under consideration.
13
14
              Do you have anything else you'd like to ask,
     Miss Nikkel or Mr. Bezerra?
15
              MR. BEZERRA: I don't. We believe it's
16
17
    perfectly responsive to specific terms and conditions
    proposed by other parties in Part 2 case in chief.
18
19
              CO-HEARING OFFICER DODUC: All right.
20
    you.
21
              MS. NIKKEL:
                           I would just ask for a
     clarification whether or not the Hearing Officers are
22
23
     asking for any written submittal --
              CO-HEARING OFFICER DODUC: No.
24
25
              MS. NIKKEL: -- on this motion.
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1 CO-HEARING OFFICER DODUC: No. I think we 2 understand the crux of Mr. Herrick's motion. 3 MS. NIKKEL: Thank you. 4 MR. HERRICK: Thank you. My cross is not that long but it covers the 5 6 topics that Mr. Bourez and Dr. Shankar go through. 7 CROSS-EXAMINATION BY MR. HERRICK: And, Mr. Bourez, I just want to 8 9 start with some ground -- laying some ground here questions, and I don't think they're inappropriate but 10 let me just see. 11 The -- one of the issues that underlies your 12 13 analysis and conclusions is that, although there's modeling for some things, because there's potential 14 discretionary decisions or new incentives, like curves 15 changing, that the actual operations may not be 16 17 reflect -- may not reflect what the modeling is 18 predicting. 19 Is -- Is that a fair statement? That is a fair statement, 20 WITNESS BOUREZ: 21 yes. 22 MR. HERRICK: So what -- Again, a couple more 23 foundational questions. 24 Is that a concern to you, that we have 25 modeling that assumes operations that bring reservoirs down to dead pool sometimes but that, in reality, we're assured that won't happen.

Does that concern you, that the evaluation is -- might be incomplete in this process?

WITNESS BOUREZ: Yes. There -- There is an inconsistency between modeling and the way that the Project could actually and does actually operate.

And there are discretionary actions in the modeling that have a wide range of potential model results.

We've seen one in the Petitioners' modeling.

MBK has submitted several different ones for the hearing. And they have very different operational results and different effects to the system.

All of those complied with the criteria of the WaterFix in terms of the North Delta diversion and so on, with the exception of some of the Spring Outflow Criteria that Dr. Shankar testified about.

So there's -- There's a lot of discretion in the way the Project could operate, and additional ability to convey water from north of the Delta to south of the Delta provides operational flexibility to the system that can be used in many different ways.

And I -- We do have a concern that the way that it was modeled doesn't reflect the way it could

```
potentially operate if it were to be built.
1
2
              MR. HERRICK: And let me -- To just tie that
3
     up:
4
              The issue about dead pool. So, say we're in
5
     a -- in a drought at some point, and operations to meet
     all the various water quality requirements and other
6
7
     obligations of projects, would be predicted to reach
     dead pool this year, next year, or something.
8
9
              It's your understanding, then, that the
     Operators would make decisions to avoid reaching dead
10
    pool; correct?
11
              WITNESS BOUREZ:
                               That's correct.
                                                 That's what
12
13
     they have done in the past and I assume they will
     continue to do that in the future.
14
              MR. HERRICK: And if they do that, that means
15
     there are changes being done to the system's operations
16
17
     that wouldn't have been reflected in modeling; correct?
              WITNESS BOUREZ:
                               That's correct.
18
19
              MR. HERRICK: So the modeling, then, doesn't
20
    predict any impacts or results from those changes if
21
     it's not assuming they haven't.
22
              I don't know if that's the right word.
23
              WITNESS BOUREZ: So, I need to add something
24
     here:
25
              I -- There -- That's not the whole story,
```

because when you operate, say, a No-Action Alternative and a With-Project Alternative, you have similar issues in both.

And in modeling it the way we've been applying it for many projects, including this one, is to compare a With-Project scenario to a No-Action Scenario.

And I think that the rule -- the appropriate question to ask here:

Is that difference and the effects of the Project going to be consistent if you have a different baseline?

So even though our baseline -- And we testified that the baseline in the WaterFix has these issues. We don't believe it's operating appropriately during droughts. That could result in a different effect of the Project during those dry periods if the baseline were different.

I'm not sure that answers your question, but there -- there is a potential that we're not characterizing the effects of the Project appropriately because we're not addressing those drought periods appropriately.

MR. HERRICK: And that's the crux of the issue, isn't it, that the modeling we use in these proceedings compares a No-Action in the Project or

other things. 1 2 But if those don't somehow, to some degree, reflect reality, it's sort of like an exercise in 3 4 fantasy; correct? 5 I mean, let me just put it this way: If the modeling assumes, you know, there's 6 7 going to be, you know, X amount of releases but, in reality, they won't do that, then the difference 8 9 between the two scenarios may be irrelevant if what's happening on the ground is something entirely 10 different. 11 CO-HEARING OFFICER DODUC: Miss Morris. 12 13 MS. MORRIS: I'm just going to object: is outside the scope of rebuttal. 14 The testimony that Mr. Bourez has offered on 15 Item Number 6, he essentially says that four of the 16 17 five key conclusions span in regards to the H3+ modeling. 18 19 His opinion's not changing. He's just 20 reiterating that it still applies to H3+. 21 None of these questions are to H3+. They seem 22 to be a rehash of questions that have been asked before 23 about the modeling and Mr. Bourez's opinion about how they should have been modeled. 24 25 CO-HEARING OFFICER DODUC: Well, he is

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1
     rehashing his opinion about how it should have been
 2
     remodeled.
              But, Mr. Herrick, your response to that?
 3
 4
              MR. HERRICK: I could end here.
                                                I was just
 5
     trying to lay foundation because that foundation, I
     think, will be part of future questions and answers.
 6
 7
     It's relevant to his analysis.
              CO-HEARING OFFICER DODUC: Yes.
                                               It's a basis
 8
 9
     of his opinion.
              MR. HERRICK: Yes.
10
              CO-HEARING OFFICER DODUC: All right.
11
     Overruled.
12
13
              MR. HERRICK: I can leave it at that.
              CO-HEARING OFFICER DODUC: Oh. Don't you want
14
15
     an answer? I just overruled --
              MR. HERRICK: If he can answer that, yes,
16
17
     but . . .
              CO-HEARING OFFICER DODUC: Mr. Bourez.
18
19
              WITNESS BOUREZ:
                               I'm sorry. Can you please
20
     repeat the question?
21
              MR. HERRICK:
                            The question was, basically,
22
     that we don't want to just do modeling and compare it
     to scenarios if they don't -- if those results don't
23
     somehow reasonably reflect reality; otherwise, we're
24
25
     not really determining the effects of the Project.
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1
              Would you agree with that?
2
              WITNESS BOUREZ: I would agree with that, yes.
              MR. HERRICK: Okay. Do you believe that the
3
4
     Boundary 1 and 2 conditions that we've all -- we've
5
     all -- we've all modeled, do those encompass or cover
     the areas of concern that you've raised?
6
7
              WITNESS BOUREZ: We testified to this in
     Part 1, and we wrote a report and submitted as
8
     evidence. And we don't believe those are --
9
     appropriately bound the potential effects of the
10
     California WaterFix.
11
              MR. HERRICK: You don't think they accurately
12
13
     describe the discretionary choices that you've been
14
     referring to.
              CO-HEARING OFFICER DODUC: Hold on.
15
              Miss Morris.
16
17
              MS. MORRIS: Same objection. His opinion
     clearly is related to them.
18
19
              His opinions compare four out of five to H3+
20
     modeling. This is talking about Boundary 1 and
21
     Boundary 2. And adequacy of that modeling is clearly
     outside the scope of his rebuttal testimony.
22
              CO-HEARING OFFICER DODUC: Mr. Herrick.
23
              MR. HERRICK: Well, I think it is.
24
25
     have to get an answer to that if you don't want.
```

```
1
     move on.
2
              CO-HEARING OFFICER DODUC: All right. Let's
3
     move on.
4
              MR. HERRICK: Mr. Bourez, I'm looking at
5
     SVWU-402, which is your Modeling Review Report
     submitted as part of the rebuttal.
6
7
              (Exhibit displayed on screen.)
              MR. HERRICK: Do you have that in front of
8
9
     you?
              WITNESS BOUREZ:
                               Yes, I do.
10
              MR. HERRICK: And your point -- I guess your
11
     Opinion Number 1 on the bottom of Page 5.
12
13
              (Exhibit displayed on screen.)
              MR. HERRICK: So, again, just sort of a
14
     foundational.
15
              Your opinion is that the H3 -- California
16
17
     WaterFix H3+ modeling does not consider the additional
     capacity provided by adding the North Delta diversions;
18
19
     correct?
20
              WITNESS BOUREZ:
                               That's correct. It does not
21
     consider the additional capacity that it -- that the
     California WaterFix can provide for June through the
22
23
     summer periods when determining South-of-Delta water
24
     supply allocations for both the CVP and SWP.
25
              MR. HERRICK: And that -- I'll call it an
```

error, if I may.

That error in the modeling, by not considering that, that would result in the model resorts -- excuse me -- model results artificially showing higher reservoir storages in Sacramento Valley; is that correct?

MR. BEZERRA: And I'm going to object that it misstates testimony. I don't think Mr. Bourez's testified that that's an error.

MR. HERRICK: That was my word.

This peculiarity of the modeling, does that result in the modeling results artificially showing higher storage in the Sacramento Valley than would be without it?

WITNESS BOUREZ: It can, and it complicates things. Let me explain.

What happens is, in the model, the San Luis Rule Curve is increased in -- in June, and more water is conveyed from north of the Delta to south of Delta, also moving that reservoir storage and diversion of excess flows. That water is exported and stored in San Luis. San Luis is higher as a result.

And the model, because of this issue, doesn't allocate that water. And so that would tend to hold more water upstream.

That, in addition to the change in the 1 2 San Luis Rule Curve, which is lower in the Action Alternative relative to the No-Action Alternative also 3 4 keeps more water north of the Delta. 5 Those are both discretionary actions. And the 6 discretion that they used in that model, in the 7 With-Project model, tends to keep more stored water north of the Delta. 8 That's a discretionary action and, in actual 9 operations, they don't have to do it that way. 10 can actually convey more stored water than allocated. 11 So, it -- I think it's unrealistic to assume 12 13 that, if you export water in June and through the summertime, that you wouldn't allocate it. I'm not 14 15 sure why you would want to export it and not allocate it. 16 17 So we don't believe that's a realistic operation. 18 MR. HERRICK: So the -- the Project which the 19 20 new diversion -- the new North Delta diversion creates 21 an incentive to create the opportunity for additional 22 exports. Is that what -- Is that part of your answer 23

It adds flexibility

It does.

24

25

there?

WITNESS BOUREZ:

to the operations. And -- And that flexibility allows 1 2 more discretion to convey stored water and allocate it. And by not recognizing that flexibility in 3 that allocation, they're not using that water and 4 5 allocating it in that year. MR. HERRICK: That last part of your answer 6 7 was my next question, then. Then the modeling is not, you think, 8 reflective of the incentives to increase exports to 9 certain times of the year. 10 WITNESS BOUREZ: It -- It tries to -- It 11 reflects it in some -- some regards. In other regards, 12 13 it does not. So, in the regard of the added export capacity 14 from June through the summertime, it does not account 15 for that when making allocations South of Delta. 16 17 does not exercise that ability to increase allocations due to that additional export capability. 18 19 MR. HERRICK: Okay. I'm turning to Page 9 now 20 of your -- excuse me -- of the SVWU-402. 21 (Exhibit displayed on screen.) 22 MR. HERRICK: And that begins your Table 1, which shows deficits of March outflow requirements 23 under the Incidental Take Permit. 24 25 Is that correct, or did I state that wrong?

```
WITNESS PARVATHINATHAN: Table 1 talks about
1
2
     CWF H3+ --
              MR. HERRICK: Yes.
                                  Yes.
3
4
              WITNESS PARVATHINATHAN: -- and outflow
5
     criteria in the CWF H3+, not in Incidental Take.
6
              MR. HERRICK: And the highlighted numbers in
7
     the far right column are the -- the deficit between
     what the model provides for the outflow criteria and
8
9
     what should be provided under the requirements; is
     that -- is that right?
10
              WITNESS PARVATHINATHAN:
                                       That's correct.
11
              MR. HERRICK: Now, the highest one you have
12
13
     is -- is 1960 on Page 10. And I want to make sure I'm
     reading that right because the flows are in cfs and
14
     then the deficit is in acre-feet so that's over a
15
     million acre-foot deficit.
16
17
              WITNESS PARVATHINATHAN:
                                       That's correct.
              MR. HERRICK: Now, later in the -- in the --
18
19
     in the document, you talk about how Department of Fish
20
     and Wildlife assumes water to meet these Spring Outflow
21
     Criteria will be -- at least partially may be obtained
22
     through purchases; correct?
23
              MS. NIKKEL: Objection: I think that
24
     misstates the testimony or it's vaque and ambiquous.
25
     If Mr. Herrick could point to the particular portion of
```

```
the testimony you're referring to, that would be
 1
 2
     helpful.
              MR. HERRICK: On Page 11, at the very bottom,
 3
 4
     the indented quote.
 5
              (Exhibit displayed on screen.)
              MR. HERRICK: Do you see that, either one of
 6
 7
     you?
              MS. NIKKEL:
                                 Thank you.
                                             That's helpful.
 8
                           Yes.
 9
              MR. HERRICK: No problem.
              I'm not the most organized brain in the world,
10
11
     clearly.
              WITNESS BOUREZ: So -- So, there's --
12
13
     there's -- We're talking about H3+ modeling in Table 1,
     and that quote is referring to the Incidental Take
14
     Permit modeling. So we're -- we're --
15
              MR. HERRICK: I'm ahead of myself.
16
17
              WITNESS BOUREZ: We're -- We're mixing two
              So if you could specify which one --
18
     things.
19
              MR. HERRICK: Okay. I apologize. I did
20
     confuse those. I'm sorry.
21
              Let's go back to Table 1, then. I just want
     to -- You may not be the correct person to answer this.
22
23
              But if somebody needs an additional million
24
     acre-feet of water in one year, does your familiarity
25
     with the system lead you to conclude whether or not
```

anybody could ever purchase that?

WITNESS BOUREZ: It would be difficult. And one of the things that I've -- I've looked at in terms of transfers -- we worked on transfers quite a lot -- and at the time that this water would need to be made available in March, there are little to no agricultural diversions at that time.

So even if there were a purchase of a million acre-feet -- which is a lot of water, and I don't know if that is possible -- it would require a release from Project reservoirs in March that would then have to be compensated later to reduce diversions.

Now, that -- that -- The effect of that would be similar to what I testified on the Delta Flow Criteria. That water has to come out of storage at that time, and that would be a very difficult operation.

I don't know -- It hasn't been analyzed and I would assume that the effects to cold water would be significant.

MR. HERRICK: Okay. Let's -- I'm running out of time, so let's move very quickly to Page 11, which was the page of that quote I referenced out of order.

(Exhibit displayed on screen.)

MR. HERRICK: On that page, you talk about how

```
the Incidental Take Permit states that the Permittee
1
2
     shall -- I'm now looking at the indented quote under
     the paragraph that starts -- has the heading of Spring
3
     Delta Outflow Criteria.
4
5
              Do you see that, the indented quote?
              MR. BEZERRA: Mr. Herrick, just for clarity:
6
7
              Are you referring to the indented paragraph
     that begins "To minimize take."
8
9
              MR. HERRICK: Yes.
10
              WITNESS PARVATHINATHAN: I see that paragraph.
              MR. HERRICK: And that -- there's an
11
     italicized part that says (reading):
12
                   "Permittee shall maintain Delta
13
              outflow (sic) . . . "
14
15
              Do you see that?
              WITNESS PARVATHINATHAN:
                                       I do.
16
17
              MR. HERRICK: And then, later down, you talk
     about a clarification letter that says that -- it
18
19
     appears to say that rather than "shall maintain,"
20
     they're now targets.
21
              Do you see that?
              WITNESS PARVATHINATHAN: I see that.
22
23
              MR. HERRICK: Am I reading that correctly,
24
     that it's your opinion that, although the Incidental
25
     Take Permit says they "shall do" something, a later
```

```
letter then says well, they're really targets, not a
 1
 2
     mandatory action; is that correct?
              MR. BEZERRA: I'm going to object as calling
 3
 4
     for a legal opinion as to the relationship between
     Incidental Take Permit and the clarification letter.
 5
              CO-HEARING OFFICER DODUC: All right.
 6
 7
     Mr. Herrick, are you just asking Mr. Bourez for what he
     means in his testimony?
 8
 9
              MR. HERRICK: Yes. I was just -- The
     follow-on, if appropriate, I was going to ask him if
10
     they knew why or what had happened -- they don't
11
     know -- to have a mandatory "shall" changed to a target
12
13
     in a later document. I just want to explore that.
     it's not appropriate, I won't.
14
15
              CO-HEARING OFFICER DODUC: Are you able to
     answer, Mr. Bourez?
16
17
              WITNESS BOUREZ:
                               I don't know how to interpret
            I don't know how it will be interpreted or
18
19
     enforced, either.
20
              MR. HERRICK: And then . . .
21
              May I ask just one more short set of
22
     questions?
23
              CO-HEARING OFFICER DODUC: (Nodding head.)
24
              MR. HERRICK: Dr. Bourez -- Mr. Bourez or
25
     Dr. Shankar, the -- the -- the clarification letter
```

```
mentioned at the bottom of Page 11, it talks about
1
2
     cutting exports down to 1500 cfs in order to achieve
     the flows necessary for the outflow of coldwater
3
4
     target; correct?
5
              WITNESS PARVATHINATHAN:
              MR. BEZERRA: And then, later on in your
6
7
     report, you talk about how just cutting exports down to
     that doesn't all the time meet what's needed for those
8
9
     export flows; correct?
              WITNESS PARVATHINATHAN: That's correct.
10
              MR. HERRICK: I think that's all I have.
11
                                                         I'd
     love to go on forever, but . . .
12
13
              CO-HEARING OFFICER DODUC: Thank you,
    Mr. Herrick.
14
15
              MR. HERRICK: I've worn out my welcome.
              CO-HEARING OFFICER DODUC: And I beg to
16
17
     differ.
              I found that you are very organized, have a
     very organized mind, especially --
18
19
              CO-HEARING OFFICER MARCUS: Frame.
20
              CO-HEARING OFFICER DODUC: -- frame, yes,
21
     especially in conducting your cross-examination.
22
              MR. HERRICK:
                            Thank you. But you should see
     it from the inside.
23
24
                           (Laughter.)
25
              CO-HEARING OFFICER DODUC: I will decline that
```

```
invitation.
2
              MR. HERRICK: Well chosen.
              Thank you.
3
              CO-HEARING OFFICER DODUC: Mr. Shutes, you're
4
5
     up.
              And as you're coming up, let me check with the
6
7
     court reporter.
              Mr. Shutes has estimated 45 minutes, so are
8
9
     you okay with going until 11:15 --
              THE REPORTER:
                             Um-hmm.
10
              CO-HEARING OFFICER DODUC: -- or we can take a
11
     break at 11:00.
12
13
              THE REPORTER: Whatever works.
14
              CO-HEARING OFFICER DODUC: Okay.
              (Exhibit displayed on screen.)
15
              CO-HEARING OFFICER DODUC: So what I would
16
17
     like to do is, after Mr. Shutes, we have
18
    Miss Des Jardins for 45 minutes, and then Grasslands,
     Group 44, for 15.
19
20
              I would like to complete the
21
     cross-examination, and we can discuss any potential
     redirect/recross. But I would like to complete this
22
    panel before we take our lunch break today.
23
24
              Mr. Shutes.
25
              MR. SHUTES:
                           Good morning. Chris Shutes for
```

```
the California Sportfishing Protection Alliance.
2
              These questions are primarily for Mr. Bourez,
     although if Mr. --
3
              And I don't see his name. I believe it's
4
5
     Parvathinathan; is that correct?
              WITNESS PARVATHINATHAN:
                                      It's close.
6
7
              MR. SHUTES: Close.
              CO-HEARING OFFICER DODUC: We call him
8
     Dr. Shankar.
9
10
              MR. SHUTES: -- Dr. Shankar, he may answer
11
     some of these, too.
              They relate to Exhibits SVWU-404, questions
12
13
     relating to his analysis of the Delta Flow Criteria,
     and also some questions relating to Exhibit 402, both
14
     Delta Flow Criteria and some of the other conclusions
15
     that he draws, and so the analysis that he makes.
16
17
                       CROSS-EXAMINATION BY
              MR. SHUTES: Good morning, Mr. Bourez.
18
19
              WITNESS BOUREZ:
                               Good morning, sir.
              CO-HEARING OFFICER MARCUS: Ask him how he is.
20
21
              MR. SHUTES: He already said he was so good, I
22
     just don't think we need to do that.
              CO-HEARING OFFICER DODUC: Actually, I want to
23
     see if his answer changes --
24
25
                           (Laughter.)
```

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1
              CO-HEARING OFFICER DODUC: -- after
2
     cross-examination, so please do ask.
              MR. SHUTES: How are you this morning,
3
     Mr. Bourez?
4
5
              WITNESS BOUREZ:
                               Super good and getting better
6
     all the time.
7
                           (Laughter.)
              MR. SHUTES:
                           Mr. Bourez, the modeling you
8
9
    performed for your analysis in Exhibit SVWU-404 was
     modeling you performed in 2001; is that correct?
10
              2011.
                    Excuse me.
11
              WITNESS BOUREZ: 2011, correct.
12
13
              MR. SHUTES:
                           Thank you.
              And the modeling did not include any
14
15
     adjustments to CalSim to account for climate change;
     did it?
16
17
              WITNESS BOUREZ:
                               It did not.
              MR. SHUTES: So one scenario you modeled for
18
19
     your analysis in SVWU-404 was the 2011 existing
20
     conditions with then-current regulatory constraints; is
21
     that correct?
              WITNESS BOUREZ:
                               That's correct.
22
23
              MR. SHUTES: And another scenario you modeled
     for your analysis was the 2011 existing condition with
24
25
     the then regulatory constraints with an added
```

regulatory requirement for Delta inflow and outflow 1 2 from January through June to be at least 40 percent of the unimpaired flow from each tributary to the Delta 3 4 except those in the San Joaquin; is that correct? WITNESS BOUREZ: That's correct. And I need 5 6 to maybe clarify. 7 When you specify a Delta outflow, you are including all the tributaries. So, when we make that 8 9 statement, we are including anything that drains into the Delta. 10 And in the modeling, the only way to respond 11 to that Delta outflow is with CVP and SWP operations. 12 13 We are not changing the east side streams; we did not change the San Joaquin. 14 15 MR. SHUTES: And in -- in that analysis, did you change, for example, operations on the Yuba River? 16 17 WITNESS BOUREZ: We did not. MR. SHUTES: Okay. So the change -- any 18 19 changes you made were strictly limited to the State 20 Water Project and the Central Valley Project; is that 21 correct? 22 WITNESS BOUREZ: That's correct. 23 MR. SHUTES: Thank you. And the third scenario you modeled for your 24 25 analysis was the 2011 existing condition with

1 then-current regulatory constraints with an ag 2 regulatory requirement for Delta inflow and outflow from January to June to be at least 50 percent of the 3 4 unimpaired flow from tributaries to the Delta with the caveats that you just described for 40 percent; is that 5 6 correct? 7 WITNESS BOUREZ: That's correct. 8 MR. SHUTES: Thank you. And you compared the model output for these 9 three scenarios in conducting an analysis; correct? 10 WITNESS BOUREZ: That's correct. 11 MR. SHUTES: And, generally, you found Delta 12 13 outflow was controlling in both of your 50 percent and 40 percent scenarios, so you focused on Delta outflow 14 15 as opposed to inflow; is that correct? That's not quite correct. 16 WITNESS BOUREZ: 17 MR. SHUTES: Okay. WITNESS BOUREZ: When we applied a 50 percent 18 19 and 40 percent unimpaired flow requirement, we applied that to Delta outflow and to Sacramento River Basin 20 21 inflow to the Delta. And that Sacramento River Basin 22 inflow to the Delta included the Yolo Bypass flow into 23 the Delta and the Sacramento River at Freeport. 24 When we apply the 50 percent unimpaired flow

to both the Sacramento River at those locations, and

the Delta, the Sacramento River tends to be above the 50 percent almost all the time, and there's only a few times that it would control and require more water to meet 50 percent of the Sac River than meeting 50 percent in the Delta.

MR. SHUTES: Thank you.

Your modeling in 2011 did not simulate, and the analysis did not include, a North Delta diversion; did it?

WITNESS BOUREZ: It did not.

MR. SHUTES: And the water supply impacts you discuss in SVWU-404 do not account for any potential water supply benefit of a North Delta diversion; do they?

MR. BEZERRA: I'm going to object as vague and ambiguous.

Water supply impacts could apply throughout the system. I think Mr. Shutes is asking about exports, but it's vague and ambiguous as it stands now.

MR. SHUTES: I believe Mr. Bourez analyzed water supply impacts, and he uses that term both in 404 and following up in 402.

And he can answer the question as he understands it from his testimony in 402. I think that would be appropriate.

```
1
              CO-HEARING OFFICER DODUC: Mr. Bourez, are you
2
     able to answer or do you need more specificity?
              WITNESS BOUREZ: I think the answer's pretty
3
4
     easy.
5
              In 2011, in the work we did, it's
     reconnaissance level work that did not consider the
6
7
     California WaterFix.
              MR. SHUTES:
                           Thank you.
8
              Mr. Bourez, in conducting your analysis for
9
     SVWU-404, you did not model or analyze any modification
10
     of the percent of unimpaired flow requirement in
11
     critically dry years or dry-year sequences; did you?
12
13
              WITNESS BOUREZ: We did not. We applied that
     in every year.
14
              MR. SHUTES: And such modification would be
15
    possible; would it not?
16
17
              WITNESS BOUREZ:
                               I think -- Yeah, many
     modifications would be possible.
18
19
              MR. SHUTES:
                           Fair enough.
20
              WITNESS BOUREZ: Even including no outflow at
21
     all is possible.
22
              MR. SHUTES:
                           Fair enough.
23
              Mr. Bourez, you state at the bottom of Page 13
     of SVWU-402 regarding modeling for the Incidental Take
24
25
     Permit for California WaterFix that there is
```

```
uncertainty regarding how Delta Outflow Criteria
1
2
     contained in the ITP will be interpreted, operated to
     and enforced.
3
4
              Do you recall that?
              WITNESS BOUREZ: Can we pull up that -- Please
5
6
    pull up that quote.
7
              (Exhibit displayed on screen.)
              MR. BEZERRA: Mr. Shutes, just clarification
8
9
     here:
10
              Are you talking about the bottom of 13; is
     that correct?
11
                           I believe so. Let's see.
              MR. SHUTES:
12
13
              (Exhibit displayed on screen.)
              MR. SHUTES:
                           Yes, last sentence.
14
15
              WITNESS BOUREZ: Yeah. Please repeat the
     question. I'm sorry.
16
17
              MR. SHUTES:
                           First, simply, do you recall your
     statement that there is uncertainty regarding Delta --
18
     how Delta Outflow Criteria contained in the ITP will be
19
20
     interpreted, operated to, and enforced?
21
              WITNESS BOUREZ:
                               Yes. And I -- If you would
     like, I'll explain now why we made that statement.
22
              MR. SHUTES: I -- I have a different question,
23
24
     and I think I'd just as soon go on, and you may choose
25
     to elaborate, if you wish.
```

Isn't it also true that there's similar 1 2 uncertainty about a potential regulatory requirement to release a percent of unimpaired flow? 3 4 MR. BEZERRA: Objection: Calls for a legal 5 conclusion. He's responding to certain proposed terms and 6 7 conditions by other parties. CO-HEARING OFFICER DODUC: And, Mr. Shutes, 8 9 would you please repeat the question for me. MR. SHUTES: Isn't it true that there is 10 similar uncertainty about any potential regulatory 11 requirement to release a percent of unimpaired flow? 12 13 CO-HEARING OFFICER DODUC: And when you say "uncertainty," what do you mean. 14 15 MR. SHUTES: I'm discussing the uncertainty that he mentions in -- at the bottom of Page 13 16 17 regarding how Delta Flow Criteria would be -- in the ITP would be interpreted --18 19 CO-HEARING OFFICER DODUC: So --20 MR. SHUTES: -- operated to and enforced. 21 CO-HEARING OFFICER DODUC: I think it's a 22 simple question. 23 Does that apply to potentially other criteria 24 in the requirements? 25 MS. NIKKEL: Can I make an objection on the

basis that that's outside the scope of Mr. Bourez's rebuttal testimony.

He's testifying here about the Incidental Take
Permit and, in the unimpaired flow context, he's
responding to proposed terms and conditions, not
generally regulatory uncertainty that's out there, so
it's outside the scope of his rebuttal testimony.

CO-HEARING OFFICER DODUC: All right. I'm going to have to sustain that.

MR. SHUTES: Could I respond before you sustain it?

CO-HEARING OFFICER DODUC: Okay. Okay. So you'll make the linkage, then, Mr. Shutes, or you're trying to.

MR. SHUTES: Yes. I think that, generally,
Mr. Bourez's testimony goes to how modeling is
performed in the -- of the CVP and SWP and that, in
pointing out the uncertainty regarding one of the -the application of one requirement, it also calls into
question of whether any requirement will have a certain
level of uncertainty.

CO-HEARING OFFICER DODUC: I will allow you the question if this does not mean that you're going to open the door asking questions about those other requirements because that would be outside the scope,

definitely.

MR. SHUTES: Not going to do that.

CO-HEARING OFFICER DODUC: All right. So I regard this, as I first thought, as a pretty general question.

Mr. Bourez, if you're able to answer whether or not the uncertainty associated in your -- the uncertainty discussed in your testimony would apply to other criteria requirements regardless of where they came from.

WITNESS BOUREZ: Okay. I think there's a difference here, because when we were looking at this, the Incidental Take Permit has Permit terms in it.

And there's a clarification letter, and we're not re -- and those, I think, are a bit more certain for the WaterFix than an unimpaired flow criteria or other criteria.

What we're testifying on here is the
Incidental Take Permit criteria for spring flow. And
the uncertainty that we were struggling with is the
clarification letter and whether the clarification
letter is what will be operated to or the actual
Incidental Take Permit itself. And are there going to
be other clarification letters in the future?

CO-HEARING OFFICER DODUC: So the uncertainty

```
that you discuss is the uncertainty specific to the ITP
 1
 2
     in the clarification letter.
              WITNESS BOUREZ: That is correct, not other
 3
 4
     criteria.
 5
              CO-HEARING OFFICER DODUC:
                                         Got it. Okay.
                           That's fine. We'll move on.
              MR. SHUTES:
 6
 7
              Mr. Bourez, I call your attention to Exhibit
     SVWU-404.
 8
 9
              And I'd like to pull up, please, .pdf Page 44
     and the top of .pdf Page 45.
10
              (Exhibit displayed on screen.)
11
              MR. SHUTES: And can you scroll up some,
12
13
     please.
              (Scrolling through document.)
14
              MR. SHUTES: Yes, that's fine.
15
              Mr. Bourez, you state in these -- in this
16
17
     passage -- and, actually, if you scroll down a little,
     it would be good if he could see a little farther down.
18
19
              Down through -- I'm specifying looking at the
20
     last paragraph down through where it says "such
21
     requirements."
22
              Do you see that?
23
                     (Pause in proceedings.)
              MR. BEZERRA: Mr. Shutes, just for clarity:
24
25
     You're talking about the sentence that begins "for this
```

1 reason" to be more accurately -- to more accurately --2 MR. SHUTES: Correct, down through that sentence. 3 4 Mr. Bourez, you say that these scenarios are 5 far beyond what CalSim was designed to evaluate; 6 correct? 7 WITNESS BOUREZ: Yeah. CalSim is not designed to change land use within the Sacramento Valley or the 8 9 San Joaquin Valley. MR. SHUTES: And you know the model impacts 10 are not the way the CVP and SWP would actually be 11 operated; is that also correct? 12 13 WITNESS BOUREZ: No model is exactly the way that the Projects will be operated. 14 15 I would like to point out that we state very clearly in this analysis that this is a reconnaissance 16 17 level analysis to get an idea of what the effects would It's not a real It's not an operations analysis. 18 detailed analysis to -- to pin down every impact of the 19 20 Delta Flow Criteria. 21 When we modeled it, the magnitude of change 22 is -- and flow regime changes are what we were trying to estimate. 23 And for that purpose, I believe that the 24 25 modeling is adequate to -- to look at very detailed

```
land use changes and many other changes. It's -- That
1
2
     wasn't the intended purpose of this model.
                           Very good. Thank you. Didn't
              MR. SHUTES:
3
     suggest that it was.
4
5
              Did you conduct the in-basin depletion
6
     analysis you discuss in this paragraph?
7
              WITNESS BOUREZ:
                               I have performed numerous
     in-basin completion analysis for the past 30 years.
8
9
     That was how I started my career, looking at in-basin
     depletion analysis.
10
              And we developed a large partial -- a large
11
     part of the CalSim depletions and have developed that
12
13
     analysis.
              MR. SHUTES:
                           My question really went to
14
15
     whether you had done an analysis such as that you
     describe in the last sentence of this paragraph -- of
16
17
     this section that starts (reading):
                   "For this reason, to more accurately
18
19
              model the effects of such requirements, a
20
              new in-basin depletion analysis would
21
              need to be constructed."
22
              And my question is: Did you conduct this
23
    particular in-basin depletion analysis?
24
              WITNESS BOUREZ: No, we did not.
25
              MR. SHUTES:
                           Thank you.
```

1 Back to SVWU-402. 2 (Exhibit displayed on screen.) MR. SHUTES: Could we please look at the last 3 4 two sentences of the first full paragraph on Page 13. 5 (Exhibit displayed on screen.) MR. SHUTES: Mr. Bourez, you state that 6 7 modeling -- the modeling of the ITP requirement should include the ability to meet the spring outflow target 8 9 by means other than reducing exports to 1500 cfs; is that correct? 10 WITNESS BOUREZ: That's correct. 11 MR. SHUTES: What would be the benefits of 12 13 doing that for the purposes of this hearing? WITNESS BOUREZ: The -- The -- It would help 14 15 us to understand the impacts of meeting that criteria, whether that's changes in reservoir operations or 16 17 effects to instream flow and habitat, as well as 18 impacts to water users. 19 MR. SHUTES: And -- And isn't it true, 20 Mr. Bourez, that actual operations would still be 21 different than the modeling even if the modeling 22 included such additional analysis? 23 WITNESS BOUREZ: Actual operations will always 24 be different than the modeling. 25 But the modeling can give you insight as to

what the effects may be, and that's the intent of the 1 2 modeling. So it would have to be performed in a -- in a manner which you can understand what those effects 3 4 would be and mitigate them. 5 MR. SHUTES: Thank you. Would it be possible to create constraints 6 7 that avoided the potential consequences of such additional means to meet outflow requirements? 8 9 WITNESS BOUREZ: If you could be more specific on the outflow requirements that you're referring to. 10 Is this the spring outflow requirement? 11 MR. SHUTES: The ITP spring outflow 12 13 requirements, March through May. WITNESS BOUREZ: I think it is possible to 14 15 develop constraints to avoid those impacts. MR. SHUTES: Thank you. 16 17 In your opinion, is The Water Forum's proposed modified outflow standard for Folsom Reservoir one 18 19 potential part of one of those potential constraints? 20 MR. BEZERRA: I'm going to object as beyond 21 the scope of his rebuttal testimony. CO-HEARING OFFICER DODUC: Mr. Shutes, unless 22 23 you can show me where it is in his testimony, or make 24 the linkage . . . 25 (Pause in proceedings.)

```
1
              MR. SHUTES:
                           I'm trying to get at Mr. Bourez's
2
     understanding with his expertise of the type of
     constraint that could be placed on the Project to avoid
3
4
     some of the concerns that Mr. Bourez and his -- his
5
     group have expressed.
              And my question goes to a specific -- trying
6
7
     to make it more specific as opposed to a more general
     statement simply that constraints can be placed.
8
              I want to know if this would be an example.
9
              CO-HEARING OFFICER DODUC: But the example
10
     that you're asking him about is outside the scope of
11
     his rebuttal testimony.
12
              Does he mention the modified flow?
13
                           No.
                                 In this section of his
              MR. BEZERRA:
14
15
     testimony, all Mr. Bourez and Dr. Shankar are doing is
     identifying the -- in the modeling how the ITP outflow
16
17
     criteria are not met. There's nothing in here about
     what you might do in response to that problem.
18
19
              MR. SHUTES:
                           That's okay. I'll move on.
20
              Could we please turn to Page 7 of SVWU-402.
21
              (Exhibit displayed on screen.)
22
              MR. SHUTES: And I'm looking specifically at
23
     Section 4 entitled (reading):
                   "CalSim . . . does not address
24
25
              effects on many types of water users."
```

```
Mr. Bourez, in the first paragraph of this
1
2
     section, you state that (reading):
              ". . . CVP and SWP Settlement Contractor
3
              deliveries . . . are 'hard coded . . . '"
4
5
              Correct?
                               That's correct.
              WITNESS BOUREZ:
6
7
              MR. SHUTES: Where does the model deliver
     those settlement contract deliveries?
8
9
                     (Pause in proceedings.)
10
              WITNESS BOUREZ: Can you restate your
     question?
11
              So where in the model grid, if you will --
12
13
              MR. SHUTES:
                           Correct.
              WITNESS BOUREZ: -- are those diversions?
14
              MR. SHUTES:
                           Yes.
15
                               They're at numerous locations
              WITNESS BOUREZ:
16
17
     on the Sacramento River and the Feather River.
              They're also with the Exchange Contractors on
18
19
     the San Joaquin River, Refuges in the San Joaquin
20
     Basin.
21
              There's also non-Project users in the Delta,
     and on numerous tributaries throughout the CVP -- or
22
23
     throughout the Bay-Delta watershed.
                           Speaking specifically of the
24
              MR. SHUTES:
25
    North-of-Delta CVP and SWP Settlement Contractors, if
```

they were to transfer water South of Delta, would that 1 2 water show up in the model as moving South of Delta or would it still show up as being delivered North of 3 Delta? 4 5 WITNESS BOUREZ: If modeled properly, it would be shown as not being diverted in the Sacramento Basin 6 7 and moving through the Delta and exported. MR. SHUTES: And in modeling that you 8 performed, how do you, briefly, go about assuring that 9 transfer water is actually shown as -- and appears as 10 being exported and as not being delivered North of 11 Delta? 12 13 MS. NIKKEL: I'm going to object both as to vaque and ambiguous. 14 Modeling that you perform is very general for 15 a professional Modeler. And also, it's outside the 16 17 scope of the testimony. I don't understand how we're talking about transfer water at this point. 18 MR. SHUTES: Part of the issue that Mr. Bourez 19 20 raises in this section, first paragraph of Page 4 21 (sic), has to do with differences between --22 CO-HEARING OFFICER DODUC: I'm sorry. Why did we move this section. Hold on. 23 I was reading 24 Mr. Bourez's testimony. 25 MS. NIKKEL: Can you -- Can you restate the

```
reference you just talked -- you just mentioned,
1
2
    Mr. Shutes?
                  I missed it.
                           Yes. It's the first paragraph
3
              MR. SHUTES:
     under Section 4.
4
5
              MS. NIKKEL:
                           Oh, same paragraph.
              MR. SHUTES:
                           Same paragraph.
6
7
              MS. NIKKEL:
                           Sorry.
              MR. SHUTES:
8
                           Yes.
9
              And the purpose, as I understand it, of this
    paragraph is to describe some of the . . . differences
10
    between what actually happens with deliveries to the --
11
     to certain types of Contractors and what the model
12
13
     does.
14
              And I am -- I am looking at another potential
15
     discrepancy between what the model does and what
     actually happens, and that goes to effects not only on
16
17
     water users but effects to instream actions.
              CO-HEARING OFFICER DODUC: And that is outside
18
19
     the scope of his rebuttal testimony.
20
              Unless, Mr. Bourez, your intent of your
21
     testimony regarding many types of water users to also
     include water transfers.
22
              WITNESS BOUREZ: It does not include water
23
     transfers in this statement.
24
```

It does not.

CO-HEARING OFFICER DODUC:

```
1
              MR. SHUTES:
                           Thank you.
 2
              That's all I have.
              CO-HEARING OFFICER DODUC: Thank you,
 3
     Mr. Shutes.
 4
 5
              Let's go ahead and take our morning break.
     When we return, we'll have Miss Des Jardins for 45
 6
 7
     minutes, and Miss Wehr, hopefully, who will return for
     15 minutes, and then we'll ask about any redirect.
 8
              But we will return at 11:15.
 9
                   (Recess taken at 11:00 a.m.)
10
               (Proceedings resumed at 11:15 a.m.:)
11
              CO-HEARING OFFICER DODUC: All right.
12
13
     11:15. We're resuming.
              And before I turn to Miss Des Jardins, a
14
     heads-up to everyone that, when we -- when we reconvene
15
     after lunch, I'm going to want to do a little bit of
16
17
     time estimates.
              So, I am looking at, right now, the Order of
18
19
     Presentation, and I'm looking at Local -- Actually,
20
     this would be -- In sixth position is 19, 24 and 25,
21
     LAND, Sac County, and San Joaquin County. They will be
22
     up tomorrow.
23
              So I'll be needing cross-examination estimates
24
     not only for that group but also the group of hearing
25
     seventh, which would be South Delta, Mr. Burke; also
```

```
eighth, Mr. Michael; ninth, Dr. Denton; 10th, which is
1
2
     the Save the California Delta Alliance Rebuttal; 11th,
     which would be Tim Stroshane and Brandon Nakagawa
3
4
     from -- I believe it's County of San Joaquin; 12th,
5
     CSPA; 13th, Miss Des Jardins; 14th, PCFFA and LAND.
              I want to see if we can at least estimate
6
7
     whether we'll get to those groups Thursday and Friday.
     That will depend a lot on the cross-examination
8
9
     requests.
              So I want to do a time check when we return
10
     from lunch.
11
              If things continue to go smoothly, I'll give
12
     you an extra -- well, extra bit of time during lunch to
13
     either go to the Farmers' Market or to focus on giving
14
     me cross-examination estimates.
15
              All right. And for those who are not here,
16
17
    please e-mail the California WaterFix hearing e-mail
     with your time estimates for cross-examination of those
18
19
    parties that I just read out.
20
              So that would be parties in sixth place in the
21
     order of testimony through 14th.
              With that, Miss Des Jardins.
22
23
              MS. DES JARDINS: Thank you.
24
25
```

1	CROSS-EXAMINATION BY
2	MS. DES JARDINS: Good morning, Mr. Bourez.
3	Thank you for being here.
4	My name is Dierdre Des Jardins with California
5	Water Research.
6	And, first, I had a followup question with
7	respect to your statement that the Proposed Modified
8	Flow Management Standard could affect Sacramento
9	Settlement Contractors.
10	Wouldn't CVP exports be reduced before
11	deliveries to Settlement Contractors were reduced?
12	MS. NIKKEL: Objection: I think this goes
13	outside the scope of Mr. Bourez's testimony.
14	I don't believe there was testimony regarding
15	the Modified FMS generally but, more specifically,
16	particular requirements within it.
17	CO-HEARING OFFICER DODUC: Yes. We went
18	through that with Mr. Shutes.
19	MS. DES JARDINS: I can read back the record.
20	There was a statement just now in response to
21	cross-examination.
22	CO-HEARING OFFICER DODUC: Yes, which we
23	which was objected to and which I sustained.
24	MS. DES JARDINS: No, no. By the State Water
25	Contractors. He Mr. Bourez made testified in

```
1
     response to that cross-examination --
2
              CO-HEARING OFFICER DODUC: I don't --
              MS. DES JARDINS: -- on the Modified Flow
3
4
     Management Standard could affect Sacramento Settlement
5
     Contractors.
              To the extent that he provided that testimony,
6
7
     for the record, I'd like to be able to follow up on it.
              CO-HEARING OFFICER DODUC: Mr. Bourez, do you
8
     recall?
9
              WITNESS BOUREZ:
                               I don't recall specifically
10
     responding to the Modified FMS or carryover in the
11
     Modified FMS.
12
13
              I did respond to hypotheticals regarding
     changes in carryover targets at Trinity, Shasta,
14
     Oroville and Folsom.
15
              CO-HEARING OFFICER DODUC: Correct.
16
17
              MS. DES JARDINS: So, changes in carryover
     storage at Folsom could potentially affect the
18
19
     Sacramento Settlement Contractors? Was that the
     opinion that you expressed?
20
21
              CO-HEARING OFFICER DODUC: Mr. Bezerra.
22
              MR. BEZERRA: Yeah.
                                   I'm going to object as an
23
     incomplete hypothetical.
24
              It depends on what the carryover storage
25
     requirements would be, and it depends on what the
```

```
operations would be in response. And so there's a wide
1
2
     variety of assumptions that are embedded in that
3
     question.
4
              And so it's an incomplete hypothetical and
5
     it's beyond the scope of rebuttal.
              CO-HEARING OFFICER DODUC: Miss Des Jardins,
6
7
     could you narrow that to something --
              MS. DES JARDINS: Well, I believe I had a
8
9
     specific reservoir -- I wanted to ask him about a
     specific reservoir, and he expressed an opinion
10
     that . . . that mandatory carryover storage target
11
     could potentially affect . . .
12
13
              My question was: If -- If a mandatory
14
     carryover storage target -- If a standard -- carryover
     storage target at Folsom, could that -- could that
15
    potentially be addressed by modifying CVP exports?
16
17
              CO-HEARING OFFICER DODUC: I'm sorry. We're
     all being distracted by this buzzing noise.
18
19
              Someone is sawing through the wall, I think.
20
              Okay.
21
              MS. DES JARDINS: Mr. Bourez, with re -- I
22
     just wanted to ask with respect to specific reservoirs.
23
              With respect to Folsom Reservoir, couldn't CVP
     exports be adjusted as needed before -- before
24
25
     affecting other reservoirs?
```

1 MS. NIKKEL: I'd like to renew my objection 2 that this is outside the scope of Mr. Bourez's testimony, which he just clarified regarding carryover 3 4 storage targets, and related to his testimony regarding flow -- Delta flow. 5 I don't see how operational changes regarding 6 7 exports and meeting other demands of the system is related. 8 9 CO-HEARING OFFICER DODUC: Sustained. MS. DES JARDINS: Okay. Mr. Bourez did have 10 specific testimony on Oroville carryover storage 11 targets and potential effects. I just -- and also 12 13 other carryover storage targets. I'd just like to be able to ask followup 14 questions, and if there's some guidance on how I might 15 be able to formulate those questions. 16 17 CO-HEARING OFFICER DODUC: Ask your question and we'll see whether there are any objections or if 18 19 Mr. Bourez is able to answer. 20 MS. DES JARDINS: Okay. So, you stated that 21 Oroville carryover storage targets could potentially --You testified that Oroville carryover storage targets 22 23 could potentially affect CVP/SWP balance. 24 Do you recall that? 25 MR. BEZERRA: I'm going to object: This is --

This is questioning following -- building on previous 1 2 cross. It's outside the scope of his actual rebuttal 3 testimony. 4 I mean, if there's something in the rebuttal 5 testimony that this is based on, we should look at that so that Mr. Bourez can answer based on that. 6 7 CO-HEARING OFFICER DODUC: I'm trying to still understand Miss Des Jardins' question. So, in order to 8 rule on the objection, I need to first understand the 9 question. 10 MS. DES JARDINS: Well, it was just he had 11 testified -- Did he testify previous -- You know, my 12 13 understanding is that cross -- testimony elicited on cross-examination is rebuttal testimony that's in the 14 record. 15 I just wanted to ask a clarifying question 16 17 about that testimony. And --CO-HEARING OFFICER DODUC: You -- Okay. 18 19 trying to understand now. 20 Yes, you may ask questions based on cross, but 21 it still does not mean that you can expand the scope 22 beyond what's appropriate in rebuttal. MS. DES JARDINS: Yes. 23 Well, he did state --24 25 Did you not state that Oroville carry -- on

```
1
     cross that Oroville carryover storage targets could
 2
     affect CVP/SWP balance?
              WITNESS BOUREZ: It -- It would be helpful
 3
 4
     to -- If I could trouble the court reporter to read
 5
     that exact quote so I know what to respond to, because
     I'm not clear I understand the question, or what I
 6
 7
     responded.
              MS. DES JARDINS:
                                Yeah.
                                       Well --
 8
 9
              CO-HEARING OFFICER DODUC: Mr. Bourez --
10
              If the witness cannot answer, then we need to
11
     move on.
              MS. DES JARDINS: Well, I would like to object
12
13
     to the extent that I'm just trying to ask questions
     about an answer that he just made. And to the extent
14
15
     I'm not able to ask followup questions because --
              CO-HEARING OFFICER DODUC: The objection,
16
17
     Miss Des Jardins, is that your followup question goes
     beyond the scope of his rebuttal testimony.
18
19
              MS. DES JARDINS: I actually just asked -- was
20
     trying to clarify whether he made that statement --
21
     just made that statement in his rebuttal testimony.
     And it was --
22
23
              CO-HEARING OFFICER DODUC:
                                         And,
24
     Miss Des Jardins, he answered he cannot answer -- I
25
     mean, he doesn't recall it; he cannot answer.
```

```
MS. DES JARDINS: Okay. Oh, I would like to
1
2
     lodge an objection that --
              CO-HEARING OFFICER DODUC: You're going to
3
     force him to answer?
4
5
              MS. DES JARDINS: -- that I'm not able to ask
6
     followup questions on the statements he just made
7
    because of Mr. Bourez's difficulty in recalling the
     statements that he just made.
8
9
              But I can go on.
              So, Mr. Bourez, I'd like to go to your
10
     statement on SVWU-402, Page 5.
11
              (Exhibit displayed on screen.)
12
13
              MS. DES JARDINS: Down at the bottom.
              (Scrolling through document.)
14
              MS. DES JARDINS: You state that -- that
15
     (reading):
16
                   "CWF H3+ Model includes artificial
17
              limits on the modeled use of joint point
18
              of diversion."
19
20
              And . . . I wanted to ask you about the -- the
21
     relationship to the documentation of modeling
22
     assumptions by the Petitioners.
23
              And if we could pull up the Final EIR/EIS -- I
    believe you can identify the assumption -- Chapter 5.A.
24
25
              That's SWRCB-102.
```

```
(Exhibit displayed on screen.)
1
2
              MS. DES JARDINS:
                                 (Reading):
                   "Appendix 5A.
3
                   "Section B: CalSim II and DSM-2
4
5
              Modeling Simulations and Assumptions."
              (Exhibit displayed on screen.)
6
7
              MS. DES JARDINS: And I'd like to go to
     Page 160.
8
              (Exhibit displayed on screen.)
9
              MS. DES JARDINS: And if we could scroll in to
10
     where it says (reading):
11
                   "CVP-SWP Coordinated Operations."
12
13
              (Exhibit displayed on screen.)
14
              MS. DES JARDINS: Mr. Bourez, are you familiar
     with this table?
15
              WITNESS BOUREZ:
                               I have looked at it quite
16
17
     awhile ago, so I'm somewhat familiar with it. I don't
18
     have it memorized.
19
              MS. DES JARDINS: Okay. Well, that was why I
20
     brought it up.
21
              I'm just wondering if -- It mentions
     (reading):
22
                   "Sharing of total allowable export
23
              capacity for project-specific priority
24
25
              pumping."
```

```
1
              And then mentions (reading):
2
                   "Equal sharing of export capacity
              under SWRCB D-1641" at the "FWS BO . . .
3
4
              NMFS BO . . . export restrictions."
5
              Do you see that?
              WITNESS BOUREZ:
                               Yes, I do.
6
7
              MS. DES JARDINS: And let's scroll over to --
     to . . . Scroll over to the right, please.
8
9
              (Scrolling through document.)
              MS. DES JARDINS: And it says -- This category
10
     in the center is for the model.
11
              Is this the general -- Is -- Is this sharing
12
13
     of export capacity assumption, is this what you're
     referring to in "artificial limits on the use of joint
14
15
    point of diversion"?
              MR. BEZERRA: Could we scroll to the top of
16
17
     the table so Mr. Bourez --
              MS. DES JARDINS: Yeah.
                                       I'm sorry.
18
19
              MR. BEZERRA: -- can see the column.
20
              MS. DES JARDINS: Scroll up to the top.
21
              (Scrolling through document.)
              MS. DES JARDINS: Yeah. This is for -- This
22
23
     is for -- Well, first, Mr. Bourez, these were
24
     assumptions for the Alternative 4 scenario; correct?
              WITNESS BOUREZ:
25
                               It appears that -- that those
```

```
export constraints and sharing of exports under the
1
2
    D-1641 EI ratio, the OMR constraints under the Smelt
     BiOp, and the export constraints under the Fish and
3
4
     Wildlife Service BiOp percent for April-May are shared
5
     equally amongst the CVP and SWP for South Delta
     diversions.
6
7
              That is different than sharing a joint point
     of diversion, which occurs in a different season than
8
9
     the springtime.
              MS. DES JARDINS: So, when -- Considering
10
     sharing of joint point diversion under D-1641, was that
11
     documented in this table anywhere?
12
13
              Is it in the previous modeling?
     something that's been carried forward?
14
15
              MR. BEZERRA: And I'm going to object as both
     vaque and ambiguous.
16
17
              As I understand it, this is an appendix to the
     Final EIR.
18
19
              And my --
20
              MS. DES JARDINS:
                                I -- I'm --
21
              MR. BEZERRA: Hold -- Hold on.
22
              My understanding also is that the modeling in
     the Final EIR is different than the CWF H3+ modeling.
23
              So to the extent we're talking about modeling
24
25
     assumptions for the Final EIR, they're not necessarily
```

```
the same modeling assumptions for CWF H3+ because it's
1
2
     two different model runs.
              CO-HEARING OFFICER DODUC: And was the
3
4
     modeling for CWF H3+ which is the focus of your
5
     rebuttal testimony?
6
              WITNESS BOUREZ:
                               That's correct.
7
              CO-HEARING OFFICER DODUC: All right.
              MS. DES JARDINS: I'm just -- Since this is the
8
9
     only table anywhere of all the modeling assumptions, I
10
     was just trying to . . .
              So -- So this assumption in the CWF H3+, the
11
     artificial limits, is that a -- Is -- Are those
12
13
     artificial limits new to the H3+ scenario?
              WITNESS BOUREZ: No. Our testimony refers to
14
15
     the USBR/DWR California WaterFix BA modeling scenario,
     as well as the H3+ scenario.
16
17
              MS. DES JARDINS: And -- And in both those
     scenarios, was the artificial limits on use of joint
18
19
    point of diversion, was that new to those models?
20
     that different than prior modeling?
21
              WITNESS BOUREZ: Our -- Our statement is in
     reference to the California WaterFix scenario that has
22
    both the North Delta diversion and the South Delta
23
     diversion.
24
25
              MS. DES JARDINS: But I meant, was it new
```

```
to -- There's been a sequence of modeling for the --
1
2
     for the WaterFix.
              Is it new to the modeling -- Is it new to the
3
4
     BA H3+ and CWF H3+ scenario modeling for the
5
     WaterFix -- for the joint -- to North Delta and South
     Delta diversions?
6
7
              WITNESS BOUREZ: I have to ask: Is that new
     relative to what modeling?
8
9
              MS. DES JARDINS: To H3 and H4.
              WITNESS BOUREZ: I'm not sure which one went
10
     first -- or -- I can't -- I don't recall what was in
11
     the Final EIS/EIR and --
12
13
              MS. DES JARDINS: Okay.
              WITNESS BOUREZ: -- I'd have to go and look at
14
15
     that modeling to determine what the differences are.
              MS. DES JARDINS: Okay. So -- So . . . the
16
17
     artificial limits on the joint point of diversion,
     what -- what component of the model are those limits
18
19
     in?
20
              WITNESS BOUREZ:
                               They're referring to the
21
     joint point of diversion, but the . . .
22
              The use of, say, State facilities to convey
23
     CVP water through the Delta and -- and export that
     water, or vice versa, would be the use of CVP
24
25
     facilities to move State Water Project water through
```

```
Federal facilities, because joint point.
1
2
              MS. DES JARDINS: Yeah. I know operationally
     what it's simulating.
3
4
              I'm just wondering what module in the CalSim
5
     model.
              WITNESS BOUREZ:
                               I don't recall which file the
6
                  There's literally hundreds of files.
7
     code is in.
    have to look for it.
8
9
              MS. DES JARDINS: Okay.
                                       Thank you.
              So, in your opinion, has the use of joint
10
    point -- has the potential use of joint point been
11
     adequately evaluated by the CWF H3+ modeling?
12
13
              WITNESS BOUREZ: As our testimony states, we
    believe there's an artificial limit where the CVP does
14
15
     not have access to unused base capacity during
     times . . . when it would be available.
16
17
              There's times where -- As our testimony
     states, there's high storage in upstream CVP
18
19
     reservoirs, and there's unused capacity at the North
20
     Delta diversion, and Banks, while CVP may be at full
21
     capacity.
              And in the California Fix -- WaterFix H3+
22
     modeling, and in the BA modeling, the model's set up to
23
    prevent full -- full use of that joint point of
24
25
     diversion.
```

```
And, that, again, is a discretionary operating
1
2
     criteria.
3
                     (Pause in proceedings.)
4
              MS. DES JARDINS: Do you have any knowledge
5
     of . . . what -- so -- of whether that is actually
6
    proposed -- that limit is actually proposed to be
7
     included in the operations?
              WITNESS BOUREZ: I don't, whether -- I don't
8
9
     have knowledge whether it will be or won't be.
                                                      It's
     included in the operation. It's, again, a
10
     discretionary action and it depends on the coordinated
11
     operation of the Projects.
12
13
              MS. DES JARDINS: So, I wanted to . . . go
    back to the -- Does the CWF H3+ modeling, would you say
14
15
     that it implements the current Coordinated Operating
     Agreement of 55 percent unimpaired flow to CVP and
16
17
     45 percent to SWP?
              WITNESS BOUREZ:
                               Those percentages do not
18
19
     refer to unimpaired flow.
                                I mean -- I mean -- not --
20
              MS. DES JARDINS:
21
     of unstored -- unstored flow. Apologies.
22
              WITNESS BOUREZ: So the Coordinated Operating
23
     Agreement refers to a 55 percent/45 percent for the CVP
     and SWP respectively of unstored water that is
24
25
     available for export, and that's . . .
```

MS. DES JARDINS: So, does the modeling 1 2 implement that but only to the -- but not to the extent that there's unused Banks capacity that might be used 3 4 by the CVP to export the export from? 5 WITNESS BOUREZ: The -- That percentages in 6 the Coordinated Operating Agreement do not refer to 7 exports alone. That refers to the State and Federal share of 8 9 that water, and what the Projects do with their share is up to their ability to operate to that. 10 Whether they store that in upstream reservoirs or export it is 11 up to their discretion. 12 13 (Pause in proceedings.) MS. DES JARDINS: So, again, trying to 14 understand. 15 I also wanted -- Do you know if there are any 16 17 limits on assumptions about Article 21 water or surplus water for the State Water Project and the CWF H3+ 18 19 model? 20 MR. BEZERRA: I think this is beyond the scope 21 of the rebuttal. I don't believe Mr. Bourez talks 22 about Article 21 water. He talks simply about continuation of modeling issues from one model to 23 24 another. 25 MS. DES JARDINS: Yeah. I just wanted to ask

```
about if -- In relation to Question 1, it says, DWR --
1
2
     the (reading):
                   "CWF H3+ model does not consider the
3
4
              additional capacity that would be made
5
              available by the North Delta diversion
              when . . . modeling allocations to
6
7
              South-of-Delta CVP and SWP Contractors."
              So -- So maybe I should -- I need to ask some
8
9
     clarifying questions.
              So -- So, on Part 1, you state that . . .
10
     that . . . the . . . the export estimates used in
11
     CalSim II to calculate SWP Table A contract allocations
12
13
     are set to those in the BA NAA.
              Is that just Table A or is it Table A and
14
     Article 21?
15
              WITNESS BOUREZ:
                               That is only Table A.
16
17
    Article 21 is a delivery of surplus water.
              And just for clarification: Article 21 is
18
     delivered when there's three conditions:
19
20
              One, there's demand for water --
21
              CO-HEARING OFFICER DODUC: And isn't it
22
     outside the scope of your rebuttal testimony?
              WITNESS BOUREZ: Yes, it is.
23
24
              CO-HEARING OFFICER DODUC: Thank you,
     Mr. Bourez.
25
```

```
1
              MS. DES JARDINS: Okay.
                                       Thank you.
2
              So you're referring to Table A.
              So -- So, the Table A -- So you -- so when you
3
4
     say that the Table A contract -- So -- So in the
5
     modeling for CWF H3+, you're saying that it is
     artificially constrained Table A allocations to the
6
7
    NAA?
              WITNESS BOUREZ:
                               It artificially constrains
8
     our allocations in the H3+ model.
9
              MS. DES JARDINS: 2008 No-Action Alternative.
10
              WITNESS BOUREZ: Not to those in the No-Action
11
     Alternative.
12
13
              MS. DES JARDINS: How -- How does it
     artificially constrain them?
14
              WITNESS BOUREZ: The California WaterFix
15
     improves the ability to convey water from North of
16
17
     Delta to South of Delta.
              It also improves the ability to take excess
18
19
     water out of the system.
20
              And when that water is exported in June or
21
     July, August, that additional export capability beyond
     the No-Action Alternative will only be allocated if the
22
23
     model export estimate is increased or recognizes.
              So that water is exported in June, and then
24
25
     it's not recognized in allocation procedure; therefore,
```

it's not allocated in that year. 2 So the result of that is an export because of the flexibility that the North Delta diversion offers 3 4 to operations, and it's not allocated. 5 And that -- If it were to be allocated, we'd have a different operation of the CVP/SWP system. 6 is -- That is what we refer to when it's artificially 7 constrained. 8 9 MS. DES JARDINS: And aren't June, July and August the months that you refer to, the months in 10 which exports are -- are -- require significant 11 reservoir releases? 12 13 WITNESS BOUREZ: It depends on the hydrology. In -- In some cases, there is excess flows in 14 15 the system in June that can be exported. Other times, June may be in a balanced 16 17 condition and the additional export capacity would allow for conveyance of stored water. 18 19 So it depends on the hydrology whether it's 20 excess or release of stored water. 21 MS. DES JARDINS: But isn't -- Aren't conditions generally balanced in July and August? 22 23 WITNESS BOUREZ: In July and August, yes. 24 June, I would say about 50 percent of the time

are excess and 50 percent in balanced.

```
1
              MS. DES JARDINS: And -- And June -- June --
2
     And are June flows driven by -- partly by snowmelt?
              WITNESS BOUREZ:
                               There's a combination in --
3
4
     in June.
5
              It depends on the hydrology. So if we have
     late rains, a lot of times the femoral streams and
6
7
     smaller streams within the Sac Valley will continue to
     flow from groundwater contribution, you know, the
8
     rainfall runoff. It doesn't just come out when it
9
     rains. It takes awhile. Soaks in the soil and comes
10
     out slowly at times.
11
              Sometimes we have rain in June and snowmelt is
12
13
     typically captured in our major reservoirs, so that's
     not necessarily contributing to that excess, and it
14
15
     depends on reservoir conditions.
              There's an awful lot of factors here.
16
17
              So, you know, the bottom line is, about half
     the time we're in a condition in the Delta where we
18
     have excess flow and half the time, it's in a balanced
19
20
     condition.
21
              MS. DES JARDINS: Do -- Do you know if that is
     true for the Q5 scenario as well for June?
22
              WITNESS BOUREZ: I don't recall. I'd have to
23
24
     look at it.
25
              MS. DES JARDINS: Okay.
                                       Thank you.
```

```
1
              So . . .
2
              And I'd also like to ask you with respect to
     Page 9 of SVWU-402.
3
4
              (Exhibit displayed on screen.)
              MS. DES JARDINS: So, you're looking at
5
6
     combined Delta exports here, and you look at an alpha
7
     deficit; correct?
              WITNESS BOUREZ:
                               That's correct.
8
              MS. DES JARDINS: But doesn't the CVP also
9
     have North-of-Delta ag service deliveries?
10
              MS. NIKKEL: Objection: This question calls
11
     for testimony outside the scope of the rebuttal.
12
13
              CO-HEARING OFFICER DODUC: Miss Des Jardins.
              MS. DES JARDINS: It's just to the extent that
14
     he -- that the testimony is . . . Looking at effects of
15
     spring outflow and whether those -- that outflow
16
17
     deficits are achievable.
                               I quess he, you know, is
     your -- So maybe I should just ask:
18
19
              So your testimony is limited to just whether
20
     those out -- outflow targets are achievable by
21
     reductions in Delta exports and not -- Correct?
                               That's correct.
22
              WITNESS BOUREZ:
23
              MS. DES JARDINS: Okay. And not looking at
24
     any up -- upstream contracts of Bureau of Reclamation;
25
     correct?
```

```
1
              WITNESS BOUREZ:
                               That's correct.
2
              MS. DES JARDINS: Okay. That's sufficient.
              And . . .
3
4
              So, I also had some questions with respect to
5
     SVWU-404.
              (Exhibit displayed on screen.)
6
7
              MS. DES JARDINS: So, in your modeling of
     impact -- reservoir impacts.
8
9
              So, the -- the -- You're -- The CalSim model
     determines delivery allocations based on projected
10
     water supply; isn't that correct?
11
              MS. NIKKEL: Objection: Vaque and ambiguous.
12
13
              What CalSim modeling assumption are you
14
     talking about?
15
              MS. DES JARDINS: I'm talking about the CalSim
     modeling used by Mr. Bourez for Exhibit SVWU-404.
16
              WITNESS BOUREZ: So Calsim will calculate the
17
     South-of-Delta CVP and SWP allocations based on the
18
19
     logic in the model.
20
              MS. DES JARDINS: And doesn't that model
21
     include projections of water supply for --
              CO-HEARING OFFICER DODUC: Let me --
22
              MS. DES JARDINS: -- the year.
23
24
              CO-HEARING OFFICER DODUC: I'm sorry.
25
              Perhaps you could go directly to the question
```

```
you want to ask specific to Mr. Bourez's testimony.
1
2
              It sounds like you're asking about general
     modeling assumptions and operations. And I'm sure this
3
4
     is laying the foundation for something. Perhaps we can
5
     just go straight to that point.
              MS. DES JARDINS: Well, it has to do
6
7
     with . . .
              Doesn't -- Aren't . . . allocations in the
8
9
     CalSim model determined and a -- the target allocations
     determined in a pre-processing stage before the
10
     optimization?
11
              CO-HEARING OFFICER DODUC: And that's another
12
13
    basic modeling question.
14
              Could you tie it specifically to Mr. Bourez's
     testimony, his analysis of the modeling DWR did?
15
              MS. DES JARDINS: Well, it's -- it's a
16
17
    basis of the models of the projected impacts on
18
     carryover storage.
19
              So if we could look at, for example, on
20
     Page 23 --
21
              (Exhibit displayed on screen.)
              MS. DES JARDINS: -- of SVWU-404.
22
              And I wanted to ask about --
23
24
              Page 23.
25
              Oh.
                   I'm not sure what document page that is.
```

```
1
     That's Page 1 of 10. Looks like he's got a . . .
2
     Sorry. I have a printout here.
              Can you search for "monthly Oroville"?
3
4
              (Exhibit displayed on screen.)
5
              MS. DES JARDINS: There it is. Figure 16.
              So, I just wanted to ask some about the
6
7
     Oroville Reservoir, how the CalSim model evaluates
     impacts on reservoir storage.
8
9
              And . . . what I was attempting to ask was:
              Does . . . Does the model make target
10
     allocations before doing the optimization?
11
              CO-HEARING OFFICER DODUC: Miss Morris.
12
13
              MS. MORRIS: Objection: Outside of rebuttal
     testimony.
14
              His testimony regarding this document is about
15
     15 percent unimpaired flows, not about CalSim modeling
16
17
     as it relates to H -- California WaterFix H3+ or export
18
     allocations.
19
              CO-HEARING OFFICER DODUC: Miss Des Jardins.
20
              MS. DES JARDINS: I believe an offer of proof
21
     that this is a key issue of how the CalSim model
22
     evaluates impacts on reservoirs.
              And to the extent that the model meets
23
     carryover storage targets only after attempting to make
24
25
     deliveries, it could significantly affect these graphs.
```

```
1
              CO-HEARING OFFICER DODUC: Mr. Bezerra.
2
              MR. BEZERRA: Yeah.
                                   I'm going to object as
     outside the scope of rebuttal as well.
3
4
              The -- This whole analysis is an analysis of
5
     the effect of certain unimpaired flow levels.
6
     not include any sort of carryover storage requirements,
     I believe, because the existing CalSim doesn't.
7
              That's a proposal in this hearing but not
8
9
     relative to this testimony.
              CO-HEARING OFFICER DODUC: Sustained.
10
              MS. DES JARDINS: I would like to say --
11
              CO-HEARING OFFICER DODUC:
12
                                         No.
                                              Move on,
13
     Miss Des Jardins.
              MS. DES JARDINS: Mr. Bourez, doesn't the
14
15
     CalSim model have specific carryover storage
     requirements for Oroville hard-coded into the model?
16
17
              CO-HEARING OFFICER DODUC: Miss Morris.
              MS. MORRIS: Objection: Again, outside the
18
19
     scope for all the same reasons as before.
20
              CO-HEARING OFFICER DODUC: Sustained.
21
              MS. DES JARDINS: Okay. Mr. Bourez, are there
     modeling assumptions that would affect this chart of
22
23
     monthly carry -- monthly Oroville Reservoir storage?
24
              CO-HEARING OFFICER DODUC: Mr. Bourez, how did
25
     you develop this chart?
```

```
1
              WITNESS BOUREZ: So, this chart was developed
 2
     based on running CalSim.
              So, we took the DWR Delivery Reliability
 3
 4
     Report in 2011. We put in the unimpaired outflow
 5
     criteria. We ran the model, and we plotted the
 6
     results.
 7
              CO-HEARING OFFICER DODUC: And that's all you
     did.
 8
 9
              WITNESS BOUREZ:
                               That's what we did, yes.
              CO-HEARING OFFICER DODUC: This does not
10
     reflect WaterFix.
11
              WITNESS BOUREZ:
                               It does not reflect WaterFix.
12
13
              MS. DES JARDINS: And, Mr. Bourez, are you
     aware that DWR's operations of Oroville have changed
14
     since 2011?
15
                           (Approaching podium.)
16
              MS. MORRIS:
17
              CO-HEARING OFFICER DODUC: Yes, it is outside
18
     the scope.
19
              MS. DES JARDINS: So, Mr. Bourez, is this --
20
     are these graphs limited by the assumptions in the DWR
21
     2011 Preliminary Reliability Report modeling?
              CO-HEARING OFFICER DODUC: I didn't catch that
22
23
     last part.
24
              MS. DES JARDINS: In the DWR 2007 Delivery
     Reliability Report.
25
```

```
CO-HEARING OFFICER DODUC: I'm not familiar
1
2
     with that report. Is it part of the record?
              MS. DES JARDINS: This is essentially
3
4
     modifications to the 20 -- Is this modeling -- I
5
    believe you just testified that this modeling is
6
     modifications to the DWR 2011 Delivery Reliability
7
     Report modeling.
              CO-HEARING OFFICER DODUC: Hold on.
8
              Miss Morris?
9
                           I guess -- I was going to object
10
              MS. MORRIS:
     that the original question was outside the scope.
11
     the last was just a statement, so I'm not sure . . .
12
13
              But in terms of the Delivery Reliability
     Report, he was responding to her answer.
14
                                               Again,
     there's been no connection back to his testimony and
15
     how this impacts WaterFix or the proposed conditions
16
17
     that this testimony was offered in, like
     CSPA-202-Errata, which is asking for carryover storage
18
19
     targets.
20
              So it's outside the scope.
21
              CO-HEARING OFFICER DODUC: Miss Des Jardins.
22
              MS. DES JARDINS: Respectfully, to the extent
     that I . . .
23
              John Herrick did move to strike this and
24
25
     that --
```

```
1
              MR. BEZERRA: Can I -- Can I clarify? I think
2
     I know where Miss Des Jardins' is going.
              CO-HEARING OFFICER DODUC: Help us.
3
              MR. BEZERRA: Yes. If I can ask a question.
4
5
     I know it's not proper but --
              CO-HEARING OFFICER DODUC:
                                         Please.
6
7
              MR. BEZERRA: Mr. Bourez, do these modeling
     results reflect your use of the model used for the 2011
8
9
     DWR Water Reliability Report?
              WITNESS BOUREZ: Yes. In fact, the red line
10
     on there is exactly that model run that is published in
11
     the DWR 2011 Reliability Report.
12
13
              The other two alternatives are based on
     modifications we made to that modeling. And those are
14
15
     documented here as the 40 and 50 percent unimpaired
     flow criteria imposed on that model run.
16
17
              MS. DES JARDINS: So this is entirely relative
     to the operations or assumptions reflected in the
18
19
     deliver -- 2011 Delivery Reliability Report modeling;
20
     correct?
21
              WITNESS BOUREZ:
                               That's correct.
              MS. DES JARDINS: Are there . . .
22
23
              Are there changes between the 2011 Delivery
24
     Reliability Report modeling and the CWF H3+ modeling?
25
              WITNESS BOUREZ:
                               Yes.
```

```
1
              MS. DES JARDINS: And there are quite -- quite
 2
     a number of assumptions?
                               I would say yeah.
              WITNESS BOUREZ:
                                                   The
 3
 4
     model's been worked on in the past eight years all the
 5
     time, and there's always changes.
              MS. DES JARDINS:
                                Thank you.
 6
 7
              That's, I believe -- Just a sec.
              Finally, I'd like to ask: If this model was
 8
 9
     run with significantly reduced, for example, Table A
     demands, could that affect this graph?
10
              CO-HEARING OFFICER DODUC: Miss Morris.
11
              MS. MORRIS: Objection: Outside the scope as
12
13
     well as relevance to the WaterFix proceeding.
              As this modeling has clearly indicated, it
14
15
     does not include any WaterFix H3+. It's only CalSim
     with 40 or 50 percent unimpaired flow.
16
17
              CO-HEARING OFFICER DODUC: Yes, but it's
     relative to the flow criteria.
18
19
              Mr. Bourez, if you can please answer.
              WITNESS BOUREZ: If I can restate the
20
21
     question.
22
              You're asking if we changed the Table A --
              MS. DES JARDINS: If -- If the Table A -- If
23
24
     this was run with, say, 2 million acre-feet Table A
25
     demands, could that affect this draft?
```

I'm not sure what 2 million 1 WITNESS BOUREZ: 2 acre-feet Table A demands would -- would do relative to what is in this model run. 3 4 I will say that I believe that the effects of 5 the 40 and 50 percent would not change much with different SWP demands simply because we're not meeting 6 7 all those demands most of the time, even in existing conditions modeling run. 8 9 So, the demand is not the limiting factor on the effects that 40 and 50 percent would have on 10 Oroville operation. 11 MS. DES JARDINS: But you didn't run the model 12 13 with different -- with lower demands; did you? WITNESS BOUREZ: That's correct. The only 14 15 changes that we made to the DWR's 2011 Reliability Report model was to impose the 40 and 50 percent 16 17 unimpaired flow criteria and then run the model. MS. DES JARDINS: If the model was run with 18 19 reduced Table A demands, would that mean that 20 deliver -- potential deliveries would then be done 21 through surplus water? 22 MS. MORRIS: Ob --23 MR. BEZERRA: Objection: Vague and ambiguous; 24 and also incomplete hypothetical. 25 Mr. Bourez just stated that in this modeling,

```
1
     the change in Table A demands wouldn't necessarily make
2
     much difference because of how little Table A was being
     delivered in the first place, so it's an incomplete
3
     hypothetical.
4
5
              MS. MORRIS:
                           I join.
              MS. DES JARDINS: But going back to . . .
6
7
              Mr. Bourez, doesn't the model attempt to meet
     delivery allocations before carryover storage targets?
8
     Isn't that how the model -- CalSim model rates are
9
     con -- are constructed?
10
              MS. MORRIS: Objection: Asked and answered.
11
              CO-HEARING OFFICER DODUC:
12
                                         Mr. Bezerra.
13
              MR. BEZERRA: (Nodding head.)
              CO-HEARING OFFICER DODUC:
14
                                         Same.
15
              All right.
                          Sustained.
              MS. DES JARDINS: To the extent that I'm not
16
17
     able to explore the reasons for Mr. Bourez's conclusion
     that the -- that changing the Table A demands wouldn't
18
19
     change this graph --
              CO-HEARING OFFICER DODUC:
20
                                         He --
21
              MS. DES JARDINS: -- I have an objection.
              CO-HEARING OFFICER DODUC: He answered --
22
23
              MS. DES JARDINS: And it --
24
              CO-HEARING OFFICER DODUC: He answered the
25
     question.
```

```
1
              MS. DES JARDINS: -- specifically has to do
2
     with the model rates.
              CO-HEARING OFFICER DODUC: He answered the
3
4
     question.
5
              To the extent that you are struggling to ask
     questions, I don't believe is a reflection of
6
7
     Mr. Bourez's attempt to answer.
              He did answer that question.
8
9
              MS. DES JARDINS: He -- That -- He hasn't
     answered a question about the -- the model rates and
10
     whether the model attempts to meet delivery targets
11
12
     before carryover storage.
13
              And I can take you to the PCFFA exhibits and
     where Eric Reyes said that the mod -- testified that
14
     the --
15
              CO-HEARING OFFICER DODUC: Mr. Bourez, could
16
17
     you put us out of our misery and say something?
              WITNESS BOUREZ:
                               The model doesn't allocate
18
19
     water irregardless of targets inn -- in Oroville.
20
     It -- It considers all of those factors when making
21
     allocations.
              It -- It's not going to drain Oroville in
22
     order to meet deliveries south of the Delta. It has a
23
24
    balance and rules that are designed to have a
25
     reasonable operation of Oroville.
```

1 And -- And -- And personally, when I run the 2 model, we attempt to maintain Oroville storage at a million acre-feet at the end of the water year, as the 3 4 criteria that Mr. Leahigh testified to. And I believe that, you know, the WaterFix operations attempt to do 5 the same thing. 6 7 So, when we ran this, we attempt to maintain that storage in Oroville. When Oroville drops below 8 that, we typically have little or no deliveries south 9 10 of the Delta and -- and the Delta's just picking up incidental water as it can. 11 So it -- The -- The model doesn't just deliver 12 13 water irregardless of the storage in the upstream reservoirs. They're done together as -- The operation 14 15 criteria's designed to do that together. codependent. 16 17 (Timer rings.) MS. DES JARDINS: I believe that . . . 18 19 Does it -- Just one followup question: 20 Does it require any manual adjusting of the 21 model results to have Oroville drain -- not draining below a million acre-feet? 22 23 WITNESS BOUREZ: We annually adjust and look 24 at the operational rules in every model run that we do, 25 unless it's a reconnaissance-level type modeling. And,

you know, the rules in -- in the model are somewhat 1 2 robust, so we do have some flexibility there. We did not manually adjust the operating rules 3 4 in these model runs because they're a reconnaissance 5 level study. If we were to do that, it would be weeks and weeks of work just to get this model run done. 6 7 that was not the intent of these model runs. It -- it would have gone beyond the information we had regarding 8 the Delta Flow Criteria. 9 So, the level of model study is commensurate 10 with the flow criteria that we had -- information we 11 had at the time. 12 13 MS. DES JARDINS: So, some of the balance --CO-HEARING OFFICER DODUC: Is this another 14 15 followup question? MS. DES JARDINS: Yes, just -- Yeah, one more. 16 17 So some of the balance and rules that are designed to have a reasonable operation are implemented 18 19 by the Modeler in their judgment of how the hot system 20 would be operated? 21 CO-HEARING OFFICER DODUC: Miss Morris. 22 MS. MORRIS: Objection: Outside the scope; 23 misstates the testimony. 24 The testimony was related to this graph and --25 and it should be properly in the scope, but this is

```
beyond, which was not --
1
2
              MS. DES JARDINS: So -- so --
              MS. MORRIS: -- very articulate. I apologize.
3
              MS. DES JARDINS: -- if Mr. --
4
5
              CO-HEARING OFFICER DODUC: Hold on.
6
              MS. DES JARDINS: Yeah, okay.
7
              CO-HEARING OFFICER DODUC: Mr. Bezerra, do you
     have anything to add?
8
9
              MR. BEZERRA:
                            Yeah.
                                   I --
              CO-HEARING OFFICER DODUC: You don't have to.
10
              MR. BEZERRA: I think it's also asked and
11
     answered. Mr. Bourez just answered that he manually
12
     has to deal with Oroville.
13
              CO-HEARING OFFICER DODUC: Sustained.
14
              MS. DES JARDINS: Okay. It was just . . .
15
              When -- When you refer to balance and rules in
16
17
     the model, did you only refer to the logic in the
18
     model?
19
              MR. BEZERRA: Objection: Vaque and ambiguous.
              I believe it's also asked and answered because
20
21
     we're dealing with Oroville, and Mr. Bourez just
22
     explained what he does with Oroville in the modeling.
              MS. DES JARDINS: So -- So -- So -- So I just
23
     wanted to clarify that the balance and rules includes
24
25
     the manual adjustment that you refer -- just referred
```

1	to.
2	CO-HEARING OFFICER DODUC: Can you quickly
3	answer that, Mr. Bourez? Then we can be done.
4	WITNESS BOUREZ: In this model run, we did not
5	manually adjust anything.
6	CO-HEARING OFFICER DODUC: Thank you.
7	MS. DES JARDINS: Okay.
8	CO-HEARING OFFICER DODUC: Goodbye.
9	MS. DES JARDINS: Okay.
10	CO-HEARING OFFICER DODUC: Miss Wehr.
11	MS. DES JARDINS: Good morning. Ellen Wehr on
12	behalf of Grassland Water District.
13	I have two areas of questions for Mr. Bourez.
14	The first is in regard to his CalSim II
15	modeling review in Exhibit SVWU-402.
16	And the second is in regard to his analysis of
17	Delta Flow Criteria in Exhibit SVWU-404.
18	CROSS-EXAMINATION BY
19	MS. WEHR: Good morning, Mr. Bourez. Are you
20	still feeling super good?
21	WITNESS BOUREZ: And getting better.
22	(Laughter.)
23	MS. WEHR: That's good.
24	Mr. Hunt if you could pull up Exhibit
25	SVWU-402.

```
1
              (Exhibit displayed on screen.)
              MS. WEHR: And scroll to Page 7.
2
              (Exhibit displayed on screen.)
3
              MS. WEHR: I'd like to ask toward the bottom
4
5
     of the page about the paragraph labeled 4.
              And also the last sentence on that page.
                                                         Ιf
6
     you could scroll down a little more.
7
              (Scrolling through document.)
8
9
              MS. WEHR:
                         Thank you.
              Mr. Bourez, if you look at the Paragraph 4,
10
     the second through fourth line about, you state that
11
     the CalSim II model (reading):
12
              ". . . does not model any changes in
13
              water deliveries . . . "
14
15
              And then you list five types of water users.
     One of those are Wildlife Refuges.
16
17
              So, is it correct that this states that
     CalSim II does not model any changes in water
18
19
     deliveries to wildlife refuges?
20
              WITNESS BOUREZ:
                               That's correct.
21
              MS. WEHR: And your exhibit then states that
22
     CVP and SWP settlement contracts and non-Project water
     deliveries are, quote, "Hard Coded" in the model.
23
24
              Based on your previous answer that CalSim II
25
     does not model any changes in deliveries to Wildlife
```

```
Refuges, would you agree that Wildlife Refuge
1
2
     deliveries are also hard coded into the model?
              WITNESS BOUREZ:
                               That's correct.
3
4
              MS. WEHR: And would you please explain, with
5
     as much detail as you can, what you mean when you --
     when you conclude that Wildlife Refuge deliveries are
6
7
     hard-coded into the Project model.
              WITNESS BOUREZ:
                               Sure.
8
9
              The model inputs demands for Wildlife
     Refuge -- Wildlife Refuges and Settlement Contractors
10
     and all Project deliveries.
11
              When the allocation logic assesses available
12
13
     water supply, it -- the first line of that logic will
     set the Exchange Contractors', Refuges', Settlement
14
     Contractors' deliveries based on Shasta criteria, which
15
     is an inflow to Shasta, and it won't adjust them after
16
17
     that point.
              MS. WEHR:
                         Thank you.
18
19
              Is it accurate to characterize this as a
20
     CalSim II modeling assumption?
21
              WITNESS BOUREZ:
                               Yes.
              MS. WEHR: Would it be accurate to
22
23
     characterize this as a modeling criteria?
24
                     (Pause in proceedings.)
25
              WITNESS BOUREZ:
                               I'm not sure how to define
```

```
"criteria."
1
2
              MS. WEHR: That's okay. It's not a trick
3
     question.
4
              WITNESS BOUREZ:
                               The way the model --
5
              MS. WEHR: Various phrases have been used
6
     throughout the hearing about the modeling
7
     assumptions -- modeling criteria, modeling assumptions,
     CalSim II logic.
8
              Is it accurate to characterize the Wildlife
9
     Refuge hard coding as part of the CalSim II logic?
10
              WITNESS BOUREZ:
                               It is.
11
              MS. WEHR:
12
                         Thank you.
13
              Earlier this morning, you discussed your
     opinion about the operational flexibility that the
14
15
     Projects have, and you stated that the way the Project
     was modeled does not necessarily reflect how it will be
16
17
     operated.
              In the last sentence in this testimony on
18
19
     Page 7, you state that the (reading):
20
              ". . . CWF H3+ modeling does not provide
              sufficient information to understand how
21
22
              the CWF project may affect CVP/SWP
23
              operations."
24
              In the context of this last sentence, were you
25
     alluding, in part, to the potential effects on the
```

hard-coded water deliveries described above in this 1 2 testimony? WITNESS BOUREZ: It would be included. 3 4 And the -- the original intent of this 5 statement is in regard to the discretionary actions, the exports estimate, the San Luis Rule Curve, limiting 6 7 joint point use, and others that we've identified. And when I look at the way the system was 8 9 operated in 2014 and 2015, we had reductions to Refuge deliveries, as I'm sure you're aware. 10 And because CalSim does not model the way that 11 we've actually operated the system, I think, you know, 12 13 in our opinion, you have to assess the model results in order to . . . to try to estimate what that effect 14 15 might be. So we don't have enough information from the 16 17 modeling, H3+ modeling and the Part 1 modeling, to understand how the California WaterFix would affect the 18 19 system operations. 20 MS. WEHR: And, in your opinion, is it 21 possible that the WaterFix Project could be operated in a way that deviates from the hard-coded water 22 deliveries in the model? 23 24 WITNESS BOUREZ: The actual system certainly 25 could be different than --

```
1
              MS. WEHR:
                         Thank you.
2
              WITNESS BOUREZ: -- the model.
              MS. WEHR: Finally, Mr. Hunt, if you would
3
4
    pull up Exhibit SVWU-404 and scroll to Page 14 --
5
              (Exhibit displayed on screen.)
              MS. WEHR: -- the final bullet on that page.
6
7
              And here, Mr. Bourez, you refer to the
     40 percent/50 percent unimpaired flow scenario in the
8
9
     2010 Delta Flow Criteria Report; is that correct?
              WITNESS BOUREZ: That's correct.
10
              MS. WEHR: And you state that (reading):
11
                   "Under both . . . scenarios, there
12
13
              would be severe water supply impacts
              including" -- at the end of the
14
              sentence -- "reductions in water
15
              deliveries to Wildlife Refuges."
16
17
              WITNESS BOUREZ:
                               That's correct. And that did
     occur in the model.
18
              What -- And that -- that didn't occur in the
19
20
     south of the Delta as much as looking at the Sacramento
21
     River.
22
              When Shasta hits dead pool, the releases at
     Keswick aren't met if we don't meet that flow
23
24
     requirement.
25
              And the next step is the Sacramento Settlement
```

```
1
     Contractors and the water they deliver to refuge is
2
     also cut.
              So we saw those cuts in that modeling.
3
4
     the model puts a higher priority on meeting
     South-of-Delta refuge over Sacramento River settlement
5
6
     and Refuge.
7
              So, when you look at that modeling, there
     isn't enough water to meet all of those requirements.
8
9
    And, you know, at a reconnaissance level model, we
     didn't go adjust to determine where all those impacts
10
     would fall out, but we know that they're fairly severe
11
     and that next step of determining what would be cut
12
13
     would likely result in South-of-Delta Refuge shortages.
              MS. WEHR: Okay. Thank you, Mr. Bourez.
14
              That's all I have.
15
              CO-HEARING OFFICER DODUC:
16
                                         Thank you,
17
    Miss Wehr, for a concise and clear cross-examination.
              Mr. Bezerra, Miss Nikkel, do you have any
18
19
     redirect and, if so, on what particular issue?
20
              MR. BEZERRA: Yes. I think we have about five
21
     minutes' redirect on two issues.
22
              One is the timing of Mr. Bourez's statements
     about American River flow standard in SVWU-404.
23
              The other is just to clarify one of his
24
25
     answers to Mr. Herrick's questions about model
```

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applications.
1
2
              CO-HEARING OFFICER DODUC: All right. Go
     ahead.
3
4
                     REDIRECT EXAMINATION BY
5
              MR. BEZERRA:
                            Okay.
                                   If we could please pull
     up Page 11 of Exhibit SVWU-404.
6
7
              (Exhibit displayed on screen.)
              MR. BEZERRA: And scroll down to the bottom of
8
9
     that page.
              (Scrolling through document.)
10
              MR. BEZERRA: Mr. Bourez, you prepared Exhibit
11
     SVWU-404 in 2012; correct?
12
13
              WITNESS BOUREZ: 2011 and 2012.
              MR. BEZERRA: Okay. And so your statement
14
15
     there at the beginning of 20 -- of Paragraph 21 on
     Page 11 here is as of 2011 and 2012; correct?
16
17
              WITNESS BOUREZ:
                               That's correct.
              MR. BEZERRA: So, that preceded the 2014 and
18
19
     2015 critical water years; correct?
20
              WITNESS BOUREZ: That's correct.
21
              MR. BEZERRA: And, to the best of your
     knowledge, did Folsom Reservoir reach its historic low
22
23
     state of storage --
              CO-HEARING OFFICER DODUC: Hold on.
24
25
              Miss Morris is dashing to the microphone.
```

```
1
              MS. MORRIS:
                           Yeah. I would object to the last
2
     question -- sorry I couldn't get here faster -- as
3
     outside the scope of the cross-examination, as well as
4
     this question about dry-year period.
              I -- No one asked any questions about dry-year
5
6
    period reservoir storage at all whatsoever.
7
              CO-HEARING OFFICER DODUC: Mr. Bezerra.
              MR. BEZERRA: Ms. Morris' statements were
8
9
     intended to elicit testimony regarding what the intent
     of the 20 -- the existing American River flow
10
     management standard is. And I'm attempting to
11
     demonstrate that that statement of intent is dependent
12
13
     on the timing, and that the world has changed since
     2011 and 2012.
14
              CO-HEARING OFFICER DODUC: Yes, but she did
15
     not get into the details that you are getting into.
16
17
              MR. BEZERRA: It's a simple question as to
     whether or not the drought may have affected the
18
19
     applicability of this statement.
20
              CO-HEARING OFFICER DODUC: Nope. Beyond the
21
     scope.
22
              MR. BEZERRA: Okay. I'll move on to . . .
23
              Well, there is one question.
              This -- This document preceded the 2014 and
24
25
     2015 critical water years; correct?
```

1	MS. MORRIS: Objection.
2	CO-HEARING OFFICER DODUC: Okay. Hold on.
3	Let's see where he goes with it because it's a
4	statement of fact.
5	MS. MORRIS: That was the question.
6	MR. BEZERRA: I just want a question about
7	saving
8	CO-HEARING OFFICER DODUC: Yes. It's a
9	statement of fact, Miss Morris.
10	MS. MORRIS: But it's outside the scope.
11	The questions I asked were about specifically
12	carryover targets and meets criteria, not as to any
13	timing.
14	CO-HEARING OFFICER DODUC: You did ask about
15	the modified
16	MS. MORRIS: No, I did not. I did not ask
17	about any modified flow standard. Mr. Bourez answer
18	questions and I clarified.
19	To go back, my only questions were related to
20	American River water flow management and whether they
21	were incorporated in the modeling.
22	And then I went on to ask other questions
23	about carryover storage impacts.
24	CO-HEARING OFFICER DODUC: Yes, you did.
25	MR. BEZERRA: Okay. I'm I'm a little

```
unclear.
2
              We're in a proceeding in 2018. The questions
     were to modeling being presented in 2018.
3
4
     Ms. Morris was attempting to draw conclusions from
5
     these statements that were made originally no later
     than 2012.
6
              I'm simply attempting to establish what the
7
     relevance of these statements is relative to the
8
9
    proceeding we're now in.
              CO-HEARING OFFICER DODUC: And . . .
10
              Well, let's -- let me -- let him proceed
11
     before -- I'll take your objection under -- But,
12
13
    Miss Morris, he's, as far as I'm recalling right now,
     just simply establishing the timeline.
14
              MR. BEZERRA: Yes. It's a -- I have two
15
     questions.
16
17
              CO-HEARING OFFICER DODUC: Ask your two
     questions.
18
19
              MS. MORRIS: May I respond, though, before,
20
    please?
21
              CO-HEARING OFFICER DODUC: Go ahead.
22
              MS. MORRIS:
                           Responding to the timeline, it is
     outside the scope, number one, and it's improper legal
23
24
     argument.
25
              If Mr. Bezerra wants to make this argument, he
```

```
can make it in civilly. It clearly says the 2009 NMFS,
1
2
     and it clearly doesn't say anything about the modified
     flow standard.
3
4
              What he's attempting to do is make a legal
     argument by going outside the scope of what was asked
5
     on cross-examination.
6
7
              CO-HEARING OFFICER DODUC: Mr. Bezerra.
              MR. BEZERRA: I have two factual --
8
9
              CO-HEARING OFFICER DODUC: We have five
     minutes.
10
11
              MR. BEZERRA: Yes.
                                  I apologize.
12
              I have two factual questions that go to
13
     Miss Morris' point about what was incorporated into the
    modeling --
14
15
              CO-HEARING OFFICER DODUC: All right.
              MR. BEZERRA: -- in this hearing.
16
17
              CO-HEARING OFFICER DODUC: Overruled,
     Miss Morris. Let's let him ask the question.
18
19
              But they are indeed just factual questions.
20
              MR. BEZERRA:
                            Yes.
21
              So, Mr. Bourez, after 2012, the 2014 and '15
     water years were critical water years; correct?
22
23
              MS. MORRIS: Same objection.
              CO-HEARING OFFICER DODUC: Overruled.
24
25
              WITNESS BOUREZ: Correct.
```

```
1
              MR. BEZERRA: I'm going to try this and we'll
2
     see.
              In 2015, Folsom Reservoir reached its lowest
3
4
     historical level of storage ever; correct?
5
              MS. MORRIS:
                           Objection: Outside the scope of
     cross-examination.
6
7
              CO-HEARING OFFICER DODUC: Overruled.
              WITNESS BOUREZ:
                               That's correct.
8
                            Thank you.
9
              MR. BEZERRA:
              Moving on to Ms. -- Ms. -- the clarification
10
     on Mr. Herrick.
11
              So, you -- Mr. Herrick asked you questions
12
13
     about the discretionary allocation logic in the model
     and your opinion that that logic does not adequately
14
15
     account for the additional diversion capacity provided
    by California WaterFix; correct?
16
17
              WITNESS BOUREZ:
                               That's correct.
              MR. BEZERRA: And in answering those
18
19
     questions, were you referring to the discretionary
20
     allocation logic known as the export estimate?
21
              WITNESS BOUREZ:
                               That's correct, and the
     San Luis Rule Curve.
22
23
              MR. BEZERRA: As to the export estimate, is it
24
     your opinion that the Petitioners' modeling
25
     inappropriately held the export estimate constant
```

```
between the No-Action Alternative and the H3+
1
2
    With-Project scenario?
              WITNESS BOUREZ:
                               That's correct.
3
              MR. BEZERRA: And the export estimate only
4
5
     reflects -- attempts to reflect operational discretion;
6
     correct?
7
              WITNESS BOUREZ:
                               That's correct.
              MR. BEZERRA: So is it your opinion that
8
9
     holding it steady between No-Action and With-Action
     inappropriately reflects how the Operators might
10
     actually allocate water with WaterFix in place?
11
              WITNESS BOUREZ:
                               That's correct.
12
13
              MR. BEZERRA: That concludes my redirect.
              CO-HEARING OFFICER DODUC: Here comes the
14
15
     recross.
              And thanks to Mr. Bezerra, you will not be
16
17
     getting a longer lunch break.
                            I apologize to everyone.
18
              MR. BEZERRA:
19
                      RECROSS-EXAMINATION BY
20
              MS. MORRIS: Mr. Bourez, do you know if the
21
     Modified FMS is part of any current regulatory
22
     requirements?
23
              MR. BEZERRA: Objection: Beyond the scope of
24
     recross.
25
              CO-HEARING OFFICER DODUC:
                                          Sorry.
                                                  I was
```

```
distracted by something else.
1
2
              MS. MORRIS:
                           I'll restate the question.
              CO-HEARING OFFICER DODUC: Please.
3
4
              MS. MORRIS:
                           The question was if Mr. Bourez
5
     knew that the modified flow standard was part of any
6
     regulatory requirement.
7
              And I don't believe it goes beyond the scope,
    because Mr. Bezerra asked about the modified flow
8
9
     standard and the timing of the report that I was asking
     about and was trying to make an argument related to the
10
11
     changes.
              And my question goes to whether or not
12
13
     Mr. Bourez knows if that modified flow standard is a
     current regulatory requirement.
14
15
              CO-HEARING OFFICER DODUC: That is beyond the
16
     scope.
17
              MS. MORRIS:
                           He -- He asked --
              CO-HEARING OFFICER DODUC: About the timing.
18
19
              MS. MORRIS: Of the modified flow standard.
20
              MR. BEZERRA: Not about the timing of the
21
     modified flow standard. I asked about the timing of
     Exhibit SVWU-404 and what events occurred in real-world
22
23
     after that document was developed.
24
              CO-HEARING OFFICER DODUC:
                                         Correct.
25
              MS. MORRIS:
                           Okay.
                                  Then let's try this:
```

1 You just testified that the -- since 2011, in 2 your finishing of the report marked SVWU-404, that there were several drought years; did you not? 3 4 WITNESS BOUREZ: Yes. What -- If the standards in MS. MORRIS: 5 6 SVW-4 -- SVWU-404 had changed in regards to carryover 7 at Folsom in the drought years that you just testified, would there be other impacts to the SWP/CVP operations? 8 9 MR. BEZERRA: Objection: Beyond the scope of recross; also incomplete hypothetical. 10 There's no definition as to what the standards 11 12 may have changed to. 13 CO-HEARING OFFICER DODUC: Sustained. MS. MORRIS: May I respond? 14 15 I did not allow him to go beyond the scope of the cross-examination. He has asked the witness 16 17 what -- He is inferring that things have changed since the questions I asked to undermine the credibility of 18 19 the questions. 20 And now, because he -- the scope has opened 21 beyond, and we are now looking at different factual 22 patterns, I'm reasking the --23 CO-HEARING OFFICER DODUC: Miss --MS. MORRIS: -- same question --24 CO-HEARING OFFICER DODUC: 25 Okay.

```
MS. MORRIS: -- I asked on cross --
1
2
              CO-HEARING OFFICER DODUC: Miss Morris --
              MS. MORRIS: -- but with the --
3
4
              CO-HEARING OFFICER DODUC: Miss Morris,
5
     perhaps you can help me understand.
              Why is this important?
6
7
                           I believe it just creates a
              MS. MORRIS:
     factual -- It completes the factual record. And I
8
     believe that if we are not allowed to ask this
9
     question, it doesn't allow us the opportunity to
10
     understand the potential changes in Mr. Bourez's
11
     opinion based on a modified flow standard and the
12
13
     timing, because that was not the focus of my
     cross-examination but is now being undermined by a
14
15
     reopening and an expansion of a redirect.
              CO-HEARING OFFICER DODUC: You are making an
16
     inference about Mr. Bezerra's redirect and then
17
     expanding that in your recross.
18
19
              So . . . I'm still sustaining the objection.
20
              MS. MORRIS: Let me try again. I'll try a
21
     different way.
              You testified that 2014 and 2015 were
22
23
     critically dry years; correct?
              WITNESS BOUREZ:
24
                               Correct.
25
              MS. MORRIS: And that Folsom reached lowest
```

```
storage ever -- lowest storage levels ever --
1
2
     correct? -- in those years?
              WITNESS BOUREZ: That's correct.
3
4
              MS. MORRIS: And was the FMS applied in those
5
     years?
                     (Pause in proceedings.)
6
7
                               The 2009 NMFS Biological
              WITNESS BOUREZ:
     Opinion had the FMS in it. I cannot say whether it was
8
9
     operated to or -- or not.
              I believe that the operations were
10
     inconsistent with that FMS at the time.
11
              MS. MORRIS: Was there another standard that
12
13
     was applied during those timeframes?
14
              MR. BEZERRA: I'm going to object as vaque and
15
     ambiquous.
              There were a lot of standards during the
16
17
     drought, including temporary urgency change orders from
18
     this Board and --
19
              CO-HEARING OFFICER DODUC: Sustained.
20
              And we're not going through all of that.
21
                      RECROSS-EXAMINATION BY
              MR. MIZELL: Mr. Bourez, you just answered
22
     that the FMS -- if Folsom operations in those
23
24
     critically dry years were not consistent with the FMS;
25
     is that correct?
```

```
1
              WITNESS BOUREZ:
                               That's correct.
2
              MR. MIZELL: So if Folsom was operated
     consistent with FMS, would it be your opinion that
3
4
     other reservoirs would have seen larger shortages or
5
     lower reservoir levels by virtue of that change?
              MR. BEZERRA: Objection: Beyond the scope of
6
7
     recross; incomplete hypothetical.
              Again, there were a wide variety of changes to
8
     regulatory rules during those years --
9
              CO-HEARING OFFICER DODUC: Actually, he's
10
     focusing on just that FMS.
11
12
              So, Mr. Bourez.
13
              WITNESS BOUREZ:
                               I need to give a little --
     talk through this a little bit.
14
15
              Because, in 2013, when Folsom started to . . .
     get low, and we went into 2014 and we didn't have
16
17
     enough rainfall to fill it, the releases from Folsom
     were above what the FMS required at the time.
18
19
     they were following it, we would have been -- we would
20
     have had much lower flow going into the drought.
21
              And if that were the case, then it's -- it's
     likely that we would have had higher --
22
23
              CO-HEARING OFFICER DODUC: I'm sorry.
                                                      I'm
24
     sorry.
25
              But we're just way, way, way expanding the
```

```
1
     scope now, so I need to bring it back.
2
              Mr. Bourez, are you able to answer the
     question without going into . . .
3
              WITNESS BOUREZ: I believe that reservoirs in
4
5
     the system could have been higher if we followed the
     FMS --
6
7
              CO-HEARING OFFICER DODUC: Thank you.
              WITNESS BOUREZ: -- the 2006 FMS.
8
9
              MR. MIZELL: Okay. So, if I understand,
     reservoirs in the system, you're meaning Shasta,
10
     Trinity, Folsom would have been higher on aggregate if
11
     the FMS was in place.
12
13
              WITNESS BOUREZ:
                               There's -- There's a
    potential that it could -- that -- Not the modified
14
     FMS.
15
              If we followed the FMS at the time, we would
16
17
    have had lower flows in the American River at the end
18
     of 2013 and we would have had a higher storage going
19
     into 2014.
20
              MR. BEZERRA:
                            Okay.
                                   Thank you.
21
              CO-HEARING OFFICER DODUC: Mr. Herrick?
22
              MR. HERRICK: I was just stretching.
23
              CO-HEARING OFFICER DODUC: Ah. Oh, boy.
24
              Your fault, Mr. Bezerra.
25
              MR. BEZERRA: Yeah.
```

1	RECROSS-EXAMINATION BY
2	MS. DES JARDINS: Mr. Bourez, isn't whether
3	Isn't it discretionary If there were impacts of
4	Modified Flow Management Standard, isn't it
5	discretionary how they would be managed?
6	MR. BEZERRA: Just I'm going to clarify.
7	The questions were about the 2006 FMS so I
8	think the question refers to that as opposed to the
9	NMFS?
10	MS. WEHR: Yeah, okay. So, if With the
11	2006 FMS, if there were impacts of, for example,
12	potentially reduced flows on American Rivers (sic),
13	wouldn't that be discretionary about how the Operators
14	managed it?
15	(Pause in proceedings.)
16	WITNESS BOUREZ: Reclamation does have
17	discretion to operate and change operations to comply
18	with the standards and criteria operating criteria
19	that are imposed on the Project. How they would
20	respond to the FMS, there is discretion.
21	MS. WEHR: And there's discretion about
22	whether it would be done through through
23	increased reservoir releases or through other
24	discretionary operations; correct?
25	WITNESS BOUREZ: It depends on what criteria

```
is governing the operation of the system.
1
2
              MS. WEHR: Okay. Thank you.
              CO-HEARING OFFICER DODUC: All right.
3
4
     almost hesitant to do this now, but since we're going
5
    beyond 12:30, anyway . . .
              Mr. Bourez, or Dr. Shankar, for that matter,
6
7
     I'm going to exercise Hearing Officer discretion and
     ask you a question, or it could be more than one,
8
9
     totally outside the scope of your rebuttal testimony.
              Did either one of you or both of you have a
10
     chance to examine DWR-1143, Second Revision?
11
              WITNESS BOUREZ: I have looked at it.
12
13
     Dr. Shankar has looked at it in greater detail than I
14
     have.
15
              I do have a copy.
              CO-HEARING OFFICER DODUC: All right.
16
                                                      So, a
17
     question to either one of you:
              Are there any modeling assumptions about
18
19
     discretionary operating criteria not included in that
20
     table that would be informative in analyzing the
21
     potential impacts of the WaterFix Project?
                               I haven't looked at it in --
22
              WITNESS BOUREZ:
23
     to know if there's discretionary criteria that's not
     included.
24
25
              CO-HEARING OFFICER DODUC:
                                          That's fine.
```

```
thought I'd just try.
1
2
              Dr. Shankar?
              WITNESS PARVATHINATHAN: Same answer.
3
4
              CO-HEARING OFFICER DODUC: All right.
5
     you both.
              And, with that, we will take our lunch break
6
7
     and we'll return at 1 -- oh, I'll be generous -- 1:45.
              MR. BEZERRA: And simply to state the obvious:
8
              I have no further examination for these
9
10
     witness, so they're done.
              CO-HEARING OFFICER DODUC: Actually, does that
11
     mean at this time you wish to -- Do you have other --
12
13
    Are you appearing on any other panels, or does that
     conclude your . . .
14
              MR. BEZERRA: I believe that conclude -- We do
15
    have the issue that the modeling tables are marked as
16
17
     an SVWU exhibit, as 406, which is a different matter.
              But as to SVWU-400 through 405, yes we would
18
19
     move them into the record.
20
              CO-HEARING OFFICER DODUC: Why don't you go
21
     ahead and move the modeling exhibit as well and see if
22
     we get any objections.
23
              MR. BEZERRA: We will add moving SVWU-406 into
24
     the record as well.
25
              CO-HEARING OFFICER DODUC: Objections?
```

1 Going once, twice . . . 2 Mr. Mizell is walking up to the microphone. MR. MIZELL: I'm unaware that Exhibit 406 was 3 referenced in either of the testimonies. 4 5 And as we filed before, we have objections to the characterization of that as a complete set of 6 modeling results, given it is not a complete set of 7 modeling results. 8 9 It also contains essentially an analysis because it has calculated columns that were done under 10 a script provided by SVWU. So I don't believe the 11 characterization of the exhibit's proper and -- because 12 it hasn't been one of their -- one of their Point of 13 Reference exhibits. 14 MR. BEZERRA: Can I please clarify a point 15 there? And this is not in evidence. 16 17 But my understanding is the Department contacted MBK Engineers to obtain the computer script 18 19 necessary to generate those modeling tables. 20 So, to characterize it as, you know, a 21 modeling script that wasn't generated by them is 22 inappropriate. They asked for that from MBK is my 23 understanding. 24 MR. MIZELL: We were told to provide modeling 25 results in the form and format demanded by SVWU.

```
reached out to them to find out what form and format
1
2
     they could handle.
              CO-HEARING OFFICER DODUC:
                                         Mr. --
3
                           It was not our discretion.
4
              MR. MIZELL:
              MR. DEERINGER:
                              Mr. Mizell, is -- is -- is it
5
     DWR's position that the cover letter to SVWU-406 does
6
7
     not correctly characterize the contents of the exhibit?
              MR. MIZELL:
                           It would be our position that it
8
9
     does not fully characterize the contents of that
     exhibit.
10
              MR. DEERINGER:
                              And are those . . .
11
              Let me see if I can phrase this right.
12
13
              Would there be any impediment to DWR or any
     other party correctly, in their view, characterizing
14
     that exhibit in closing briefs?
15
              MR. MIZELL: No.
16
17
              MR. DEERINGER:
                              Okay.
              CO-HEARING OFFICER DODUC: So . . .
18
19
              MR. DEERINGER: And -- I'm sorry -- I did have
20
     one -- one or two followup questions for Mr. Mizell or
21
     any other objecting party, I suppose.
22
              Do I understand correctly that one basis for
23
     your objection was that SVWU-406 was not referenced in
24
     any testimony?
25
              CO-HEARING OFFICER DODUC:
                                          That's not a
```

requirement, I don't think, for us to move it into the 1 2 record. MR. MIZELL: That's correct. And you --3 You've ruled on that before. 4 5 I believe where my objection is going is more 6 about our inability to cross-examine anybody upon the calculated fields that were required in that exhibit 7 because it was not referenced in anybody's testimony. 8 So to admit a calculated column -- a 9 calculated set of results into evidence without the 10 11 ability to cross-examine on it would prejudice the 12 Department. 13 MR. DEERINGER: Did the Department not have the opportunity to conduct redirect, after I believe it 14 15 was, Group 7 attorney cross-examined using that exhibit? 16 17 I made a mistake and I'm asking for clarification. 18 19 MR. MIZELL: Redirect is limited to the scope 20 of cross, and cross didn't go into the accuracy or 21 applicability of the calculated field. 22 Is not a permissible scope of MR. DEERINGER: 23 redirect the basis for opinions provided on cross? I don't believe we were asked to 24 MR. MIZELL: 25 provide an opinion about the characterization of the

```
differential columns provided in that exhibit.
1
2
              MR. DEERINGER:
                              Understood.
              CO-HEARING OFFICER DODUC: Yes,
3
     Miss Des Jardins.
4
5
              MS. DES JARDINS: I would like to support the
     introduction -- the submission of that exhibit because
6
     I used the columns, which are simply tabulations of
7
     data from -- outputs from the modeling, on . . . on
8
     cross-examination of Nancy Parker.
9
              And I believe that was one of the reasons that
10
     the exhibit was requested, was to add a common exhibit
11
     that all parties could use and refer to.
12
13
              And -- And Mr. Mizell did have an opportunity
     to do recross after I introduced those pages, and ask
14
15
     them of Nancy Parker, and he did not do so.
              CO-HEARING OFFICER DODUC: All right. On that
16
17
     note, we will accept into evidence all the exhibits
     moved by Mr. Bezerra, except for 406. And we will take
18
19
     under consideration the objection and support noted.
         (Sacramento Valley Water Users' Exhibits 400 through
20
          405 received in evidence)
21
              MS. WEHR: Will it be allowable for us to
22
23
     submit a written response to objections on SVWU-406
24
     just stated here today?
25
              MR. BEZERRA: I also have a question.
```

This has been thoroughly confusing to me since 1 2 the DWR objected to this exhibit. I don't understand. Are they disputing the 3 4 accuracy of the results? 5 CO-HEARING OFFICER DODUC: If my recollection is correct, we have already received a -- written 6 7 objections from DWR on this table. And did we not only receive a written response from you to DWR's objection? 8 9 MS. WEHR: I'm sorry. I just missed that. CO-HEARING OFFICER DODUC: We already have --10 I believe we already have in the record DWR's written 11 objection to this table and your response to that 12 13 objection. MR. BEZERRA: I don't think we responded in 14 writing. We -- We moved it into the record via a 15 written motion. 16 17 CO-HEARING OFFICER DODUC: And DWR objected. MR. BEZERRA: DWR objected. 18 I don't think 19 we've provided a written response. CO-HEARING OFFICER DODUC: You should provide 20 21 a written response. 22 MR. BEZERRA: Okay. 23 CO-HEARING OFFICER DODUC: And please do so 24 by -- let's give you a deadline -- 5 p.m. Friday? 25 MS. WEHR: That's fine. Thank you.

```
MR. BEZERRA: Yes.
                                   Thank you.
 1
 2
              CO-HEARING OFFICER DODUC: Thank you.
              All right. With that, the Farmers' Market is
 3
     closed, or closing soon, so we are adjourning and we
 4
 5
     will reconvene at 1:45.
 6
              Oh, Mr. Bezerra, ugh.
 7
                   (Lunch recess at 12:41 p.m.)
 8
 9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
```

AFTERNOON SESSION 1 2 (Whereupon, all parties having been 3 duly noted for the record, the 4 proceedings resumed at 1:45 p.m.) 5 CO-HEARING OFFICER DODUC: All right. It's Please take a seat before we turn to Grassland. 6 7 Let's do what I said we would do and try to project as 8 best we can how the rest of this week will go. 9 Before I do, I guess I'd need to respond to 10 Mr. Berliner's request yesterday to bring back DWR's 11 three remaining witnesses this week pending our 12 decision on the motions to strike which were raised by 13 Ms. -- Mr. Keeling, Ms. Meserve, and I believe 14 Ms. Des Jardins, yesterday, then with Mr. Jackson, also. Okay. 15 16 Mr. Berliner, that request is denied. We want 17 to be able to review the motions and your responses to 18 those motions, and we recognize that your three 19 witnesses do have a time constraint. So should we 2.0 determine that they will be allowed to testify, we will 21 certainly arrange it for a time when they will be 2.2 available. I believe it was after August 27th. Okay? 23 MR. BERLINER: Thank you. 24 CO-HEARING OFFICER DODUC: With that, then let 25 me get estimates, if I could, for cross-examination of

```
the next group, which I believe is Group 19, 24, and
 2
     45, presenting witnesses Shilling and Stokely.
 3
     Cross-examination for that group, please?
 4
              MR. MIZELL: Tripp Mizell, DWR. And for all
 5
     the estimates that I'll give to you today, we've done
     our best to coordinate with State Water Contractors,
 6
 7
     Inc. So this will be combined times. For Shilling and
 8
     Stokely, we estimate 45 minutes.
 9
              CO-HEARING OFFICER DODUC: All right.
10
              MR. HERRICK: John Herrick, South Delta
11
     parties, 10, 15 minutes at the most.
12
              MS. DES JARDINS: Deirdre Des Jardins,
13
     California Water Research, 15 minutes at the most.
              CO-HEARING OFFICER DODUC: Mr. Jackson.
14
15
              MR. JACKSON: Yes, 15 minutes.
              CO-HEARING OFFICER DODUC: And I will assume,
16
17
     Ms. Mitterhofer, that we did not receive any e-mail
18
     requests over the lunch break?
              MS. MITTERHOFER: I think we received one, and
19
2.0
     I -- we received one, and I'm -- accessing my e-mail
21
     right now.
22
              CO-HEARING OFFICER DODUC: Okay. So we'll get
23
     back to you later.
24
              So then the group after that I expect will be
25
     Group 21, South Delta Water Agency, Mr. Herrick's
```

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witness, Mr. Burke.
 2
              Cross on that, please? Oh, was there a
 3
     change?
 4
              MR. JACKSON: Yes. If it's okay with the
 5
     Hearing Officer and DWR and the Bureau, I would like to
 6
     change with Dr. -- Dr. Burke to put Mr. Cannon and
 7
     Mr. Shutes, who are No. 14, up to No. 9.
              CO-HEARING OFFICER DODUC:
 8
                                        Okay.
 9
              MR. MIZELL: It's --
              CO-HEARING OFFICER DODUC: I'm sorry.
10
11
     objection to that switch?
12
              MR. MIZELL: Our cross-examination preparation
13
     for -- I think it's Dr. Burke, right?
              CO-HEARING OFFICER DODUC: For whom?
14
15
              MR. MIZELL: Is that we would need Burke to go
     this week. If Burke's -- with this switch, Mr. Burke
16
17
     is pushed out to next week. It causes a rather
18
     significant shift in our cross-examination preparation
19
     at this point.
2.0
              So if -- if we can ensure that Burke will be
21
     available for cross-examination before the close of
22
     business on Friday, then we would --
23
              CO-HEARING OFFICER DODUC: So, Mr. Herrick, is
24
     this change because of Mr. Burke's unavailability this
     week?
25
```

```
This is a consideration
              MR. HERRICK: No.
 1
 2
     for --
 3
              CO-HEARING OFFICER DODUC: So would there be
 4
     any objection then with just moving CSPA, Mr. Cannon
 5
     and Mr. Shutes, ahead of Mr. Burke?
              MR. WALTER: Hanspeter Walter, Westlands Water
 6
 7
     District with San Luis and Delta-Mendota Water
 8
     Authority. Does that mean that Cannon and Shutes might
 9
     go today?
10
              CO-HEARING OFFICER DODUC: No. I'm talking
11
     about tomorrow.
12
              MR. WALTER: Okay.
13
              CO-HEARING OFFICER DODUC:
                                          Hearing no
14
     objection, then, we will, after the conclusion with
15
     Dr. Shilling and Mr. Stokely, we will then move to CSPA
     with Mr. Cannon and Mr. Shutes.
16
17
              Estimates of cross-examination for that group?
              MR. MIZELL: DWR estimates 45 minutes.
18
19
              MR. WALTER: San Luis and Delta-Mendota Water
2.0
     Authority, 15 minutes for Cannon and Shutes.
21
              MR. HERRICK: South Delta parties, 10 minutes.
22
              MS. DES JARDINS: Deirdre Des Jardins,
23
     Group 37, 20 minutes.
24
              CO-HEARING OFFICER DODUC:
                                          20?
25
              MS. DES JARDINS: Yes.
```

```
1
              CO-HEARING OFFICER DODUC: All right.
                                                      Then
 2
     after group -- after that group, we will then get to
 3
     Mr. Herrick's Tom Burke.
              And cross-examination estimates for Burke?
 4
 5
              MR. MIZELL: DWR would request two hours,
 6
     please, in combination with the State Water
     Contractors.
 7
              CO-HEARING OFFICER DODUC: Anyone else?
 8
 9
              MR. JACKSON: CSPA parties, 20 minutes.
                                                        I'11
10
     try to stay within that.
11
              MS. DES JARDINS: Deirdre Des Jardins, 20
12
     minutes.
              CO-HEARING OFFICER DODUC: After that we'll
13
14
     then get to Dr. Jeffery Michael.
              Estimate of cross?
15
16
              MR. MIZELL: I'm sorry. For Michael's?
17
              CO-HEARING OFFICER DODUC: Yes, Jeffery
     Michael.
18
19
              MR. MIZELL:
                           Thirty minutes, please.
2.0
              MR. WALTER: San Luis and Delta-Mendota Water
21
     Authority Westlands, 10 minutes for Dr. Michael.
22
              MR. JACKSON: CSPA, 15 minutes.
23
              MS. DES JARDINS: Deirdre Des Jardins, 15
24
     minutes. And there's a request for Group 47, Osha
25
     Meserve, up to 25 minutes for Burke and Michael, and
```

1	two other parties which I'll mention later.
2	CO-HEARING OFFICER DODUC: Let me make sure I
3	understand. That was 25 minutes being requested by
4	Ms. Meserve to cross?
5	MS. DES JARDINS: Twenty-five minutes each for
6	Burke and Michael, and 25 minutes for Denton and
7	each for Denton and State of California Delta Alliance,
8	who you haven't asked for yet.
9	CO-HEARING OFFICER DODUC: You were mumbling.
10	I did not hear that last part.
11	MS. DES JARDINS: My apologies. And 25
12	minutes each for Denton and Save the California Delta
13	Alliance.
14	CO-HEARING OFFICER DODUC: Oh, which I
15	MS. DES JARDINS: You have not mentioned yet.
16	CO-HEARING OFFICER DODUC: Okay. So anyone
17	else for Delta, Michael?
18	(No response)
19	CO-HEARING OFFICER DODUC: All right. Now
20	we'll move on to Dr. Denton and cross, please, for DWR.
21	MR. MIZELL: The Department would request
22	45 minutes.
23	CO-HEARING OFFICER DODUC: Okay. And let me
24	go ahead and put Meserve down for 25 before I forget.
25	MR. HERRICK: South Delta parties. I would

1	have 30 minutes for Mr. Denton.
2	MR. BEZERRA: Ryan Bezerra. I think I'd have
3	30 minutes, maximum, for Dr. Denton.
4	MR. JACKSON: Michael Jackson. I think we
5	have 25 minutes.
6	CO-HEARING OFFICER DODUC: Okay.
7	MS. NIKKEL: Meredith Nikkel for Group 8,
8	Tehama-Colusa Canal Authority, 10 minutes.
9	MS. DES JARDINS: Deirdre Des Jardins,
10	California Water Research, up to 35 minutes.
11	CO-HEARING OFFICER DODUC: All right.
12	Mr. Denton is popular Dr. Denton. All right.
13	Next then we will have Save the California
14	Delta Alliance.
15	MR. MIZELL: Department estimates 30 minutes.
16	CO-HEARING OFFICER DODUC: And Ms. Meserve
17	requests 25 minutes.
18	Anyone else?
19	MS. DES JARDINS: Deirdre Des Jardins, up to
20	20 minutes.
21	CO-HEARING OFFICER DODUC: All right. And
22	next would be DDJ with Mr. Wehling, is it? Or did
23	we no. That's no longer the case.
24	So then after that would be PCFFA and LAND
25	with Oppenheim, DDJ, and Mr. Stokely.

1	Cross on that, please?
2	MR. JACKSON: Before I do cross on that, the
3	California Sportsfishing Protection Alliance,
4	Group 13, Tim Stroshane and Brandon Nakagawa.
5	CO-HEARING OFFICER DODUC: Oh, did I skip you?
6	MR. JACKSON: Yeah.
7	CO-HEARING OFFICER DODUC: That's right. I'm
8	sorry, because you were moving Tom Cannon and
9	Chris Shutes.
10	MR. JACKSON: Yes.
11	CO-HEARING OFFICER DODUC: All right. So
12	let's go back. My apologies.
13	After Save the California Delta Alliance, we
14	have the two witnesses there, Stroshane and Nakagawa.
15	MR. JACKSON: Nakagawa.
16	CO-HEARING OFFICER DODUC: Cross estimate for
17	that, please?
18	MR. MIZELL: 45 minutes, please.
19	MR. WALTER: 15 minutes for San Luis.
20	MR. HERRICK: South Delta parties, 10, 15
21	minutes.
22	CO-HEARING OFFICER DODUC: Okay. Now we get
23	to PCFFA, and that would be Oppenheim, Ms. Des Jardins,
24	and Mr. Stokely.
25	MR. MIZELL: The Department is requesting 20

1	minutes.
2	CO-HEARING OFFICER DODUC: 20 minutes.
3	MR. WALTER: 30 minutes for San Luis and
4	Westlands.
5	CO-HEARING OFFICER DODUC: Anyone else?
6	(No response)
7	CO-HEARING OFFICER DODUC: All right. I think
8	that gives us enough to play with for the rest of this
9	week. I don't know that we'll get to all of them, but
10	at least you have some rough time estimates.
11	Ms. Taber.
12	MS. TABER: Thank you. I'm following up on my
13	request yesterday that we identify dates certain for
14	Dr. Paulsen. We've conferred with the Department of
15	Interior and DWR, and they are amenable to having her
16	appear next Friday, the 24th, if that is convenient for
17	the Hearing Officers.
18	CO-HEARING OFFICER DODUC: I thought she was
19	not going to be available next Friday.
20	MS. TABER: She's not available on the 23rd.
21	CO-HEARING OFFICER MARCUS: Right. She's not
22	available tomorrow or the 23rd.
23	MS. TABER: She wasn't available on this
24	Thursday and next Thursday.
25	CO-HEARING OFFICER DODUC: All right. Are

```
there any objections to that?
 2
              (No response)
 3
              MS. TABER: Thank you.
 4
              CO-HEARING OFFICER DODUC: All right.
                                                      Then we
 5
     will look forward to having Dr. Paulsen present on
     behalf of Groups 13, 22, and 27 on Friday the 24th?
 6
              MS. TABER: Yes, please.
              CO-HEARING OFFICER DODUC: And since we're at
 8
 9
     it, can we get estimates of cross as well? I'd like to
10
     see if we can do it all in one day. We'll see.
11
              MS. MORRIS: The Department and State Water
12
     Contractors have a combined two hours cross-examination
13
     for -- estimated combined for Paulsen.
14
              CO-HEARING OFFICER DODUC: All right.
15
              MR. HERRICK: South Delta parties, 20, 30
     minutes for Dr. Paulsen.
16
17
              MR. JACKSON: California Sportsfishing
18
     Protection Alliance, 20 minutes for each of the three,
19
     so a total of 60. They're three distinct topics.
2.0
              MS. DES JARDINS: Deirdre Des Jardins,
21
     California Water Research, up to 30 minutes.
22
              CO-HEARING OFFICER DODUC:
                                         30 minutes, total?
23
              MS. DES JARDINS:
                               Yes.
24
              CO-HEARING OFFICER DODUC: And, Ms. Morris,
25
     that was two hours, total? Not per group?
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MS. MORRIS: (Shakes head) 1 2 CO-HEARING OFFICER DODUC: All right. That 3 does give us a lot to work with. Thank you all for 4 being so organized. 5 Are there any other housekeeping matters? 6 And Mr. Bezerra is once again not wearing his 7 happy face. Well, you know, getting blamed 8 MR. BEZERRA: 9 for everybody getting out late to lunch was a sobering 10 experience. 11 Anyway, just a quick question regarding 12 DWR-1143. So I'm wondering to what extent that's a 13 subject for cross-examination for all of these other 14 witnesses. Some of them have modeling expertise. Some 15 of them may know about results. 16 Obviously, their rebuttal testimony in and of 17 itself doesn't address 1143 because nobody's rebuttal 18 testimony addressed that. So I'm wondering if you can 19 provide some guidance as to the allowable scope for 2.0 asking other witnesses about 1143 and the assumptions 21 that are in there or not in there? 22 CO-HEARING OFFICER DODUC: Is this just 23 because I asked your witness about 1143? 24 MR. BEZERRA: No. I'd be interested in some 25 of these witnesses' opinions about what's in there and

how that may affect project operations.

2.0

CO-HEARING OFFICER DODUC: Ms. Morris.

MS. MORRIS: I would to object that. First of all, I think it's premature because I think it would depend on the question, and there may be the ability for someone to tie it back. But to the extent it's just questions about 1143 2nd Revised, that seems to go beyond the scope of the Board's hearing [sic] that the Department made witnesses available to answer questions.

And then my final objection would be that it's definitely would most likely go beyond the scope of the witnesses' rebuttal testimony which the cross-examination is going to. But again, it is possible that it could come up and be tied back to something in their testimony.

CO-HEARING OFFICER DODUC: All right. Before everyone chimes in, let me be very clear right now.

I recognized when I asked Mr. Bourez and Dr. Shankar that question earlier that I went beyond the scope of their rebuttal testimony. And I did say I was exercising my discretion as Hearing Officer.

I am not granting that discretion to the other parties. You are limited on cross to the scope of the rebuttal testimony. That's not to say, Ms. Morris,

that I might not decide to exercise my Hearing Officer 2 discretion and ask that question again should I feel 3 that additional information might be helpful. 4 MR. BEZERRA: I appreciate that guidance. 5 That's very helpful. Thank you. CO-HEARING OFFICER DODUC: All right. 6 7 MR. JACKSON: 1143 was not available when 8 rebuttal testimony was filed. So it will go completely 9 unquestioned in the hearing if you don't allow some 10 questions. CO-HEARING OFFICER DODUC: Mr. Jackson, you 11 12 had opportunity to question petitioners' witnesses, 13 Mr. Reyes and Dr. Chilmakuri, the other doctor about 14 1143. 15 MR. JACKSON: And we did. CO-HEARING OFFICER DODUC: 16 And you did. 17 MR. JACKSON: But in terms of the insight that 18 could be gained from a bunch of very good witnesses in 19 the next week or so, then there is no chance to ask 2.0 questions on 1143. So the way it came in after the 21 rebuttal time period is pretty prejudicial to the 2.2 cross-examiners. 23 CO-HEARING OFFICER DODUC: Are you making a request? a motion? Because --24 25 MR. JACKSON: I'm making --

CO-HEARING OFFICER DODUC: Mr. Jackson, I am limiting to the scope of rebuttal testimony -- I am limiting the scope of cross-examination to rebuttal testimony presented.

MR. JACKSON: And 1143 and the other -- the supplemental environmental document?

CO-HEARING OFFICER DODUC: As long as the rebuttal testimony is somehow linked to it, if you can establish that connection.

MR. JACKSON: All right.

2.0

CO-HEARING OFFICER DODUC: The only exception that we've made in terms of -- I think I know what you're going at here, Mr. Jackson.

We directed petitioners to answer questions even if it was outside the scope of their rebuttal testimony with respect to DWR-1143 2nd Revision and the Supplemental EIR Administrative Draft document because that was our charge to them for the scope of this rebuttal.

This does not mean that all parties are then now free to ask questions about things outside the scope of the rebuttal testimony. That was a special onus we put on petitioners.

MS. DES JARDINS: I would like to respectfully request the Hearing Officers then -- it would seem --

for protestants to have a chance to examine and rebut 2 the assertions in DWR-1143 or the testimony by DWR's 3 witnesses, it would then require surrebuttal on that --4 on that exhibit and the testimony because it's not 5 within the scope of rebuttal. Would it not then require surrebuttal, Madam Chair? 6 CO-HEARING OFFICER DODUC: If that's your 8 request, it's noted. 9 And I will remind everyone that no good deed 10 goes unpunished, that DWR-1143 2nd Revision was 11 actually required of petitioners by us in the hope that 12 it would clarify and help us understand the various 13 modeling assumptions and the various operating criteria 14 and how that -- all those things fit together. 15 It was not testimony, per se, offered by 16 petitioners like it would be in the normal course of 17 this hearing. It was a special directive requirement 18 of this Board and, therefore, there were extenuating 19

requirements associated with it for the purpose of this rebuttal phase.

So on that note, we will now again emphasize that the scope of cross is limited to the rebuttal testimony of the witnesses being crossed.

Anything else?

2.0

21

22

23

24

25

MS. TABER: I've just received a request from

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Mr. Keeling for 20 minutes of cross-examination of
 2
     Mr. Shutes and Mr. Cannon on behalf of San Joaquin
 3
     County.
 4
              CO-HEARING OFFICER DODUC: Okay. Hold on.
 5
              So Shutes and Cannon -- Keeling, that was 20
     minutes?
 6
 7
              MS. TABER: Correct.
              CO-HEARING OFFICER DODUC: Ms. Morris.
 8
              MS. MORRIS: Before the testimony of
 9
10
     Mr. Ortega begins, I had an objection -- a motion to
11
     strike.
12
              So could you please pull up GWD-22 revised.
13
              The motion to strike is to strike from Page 2,
14
     Line 19, through Page 8, Line 7, as improper rebuttal
15
     testimony for two reasons. The testimony as drafted is
16
     a summary of DWR and the Bureau witness testimony with
17
     citations and does not offer new evidence by
18
     Mr. Ortega. Further, it is legal argument since it
19
     does not provide any new testimony but rather argues
2.0
     about existing testimony in the record.
21
              For example, if you turn to Page 2, please,
22
     and scroll to the bottom.
23
              Each paragraph that I just went through has a
24
     summary of the testimony and then a footnote, and the
25
     footnote, as you can see, is to testimony that's
```

already in the record.

2.0

Mr. Hunt, could you scroll to the next page.

And that continues in each paragraph all the way through Page 8, Line 8, which is properly rebuttal testimony according to the Hearing Officer's ruling, and that is where it begins talking about the proposed water rights terms and conditions.

So my motion, again, is to strike as improper rebuttal testimony for being -- not providing new evidence but rather making arguments about the evidence and characterizing evidence that's already in the record.

CO-HEARING OFFICER DODUC: Your response,
Ms. Wehr.

MS. WEHR: Hearing Officer Doduc, it's surprising that this motion to strike comes at this time, given that the Hearing Officers already struck a portion of our testimony several weeks ago which we did not object to. It would have been proper or more timely for the petitioners or State Water Contractors to object and request further stricken testimony instead of springing it on us right before my client is about to testify.

I do -- although it does characterize some of the testimony that Mr. Ortega is reflecting on, there

are portions of this testimony that's requested to be stricken that contain Mr. Ortega's personal knowledge, personal observation, or confirmation of some of the testimony that was provided on direct.

2.0

For example, Page 6, Line 15, Mr. Ortega confirms his personal experience regarding how refuge water supplies are allocated. And Page 7, Lines 17 to 18, again Mr. Ortega confirms his knowledge about Reclamation's position on participation in the California WaterFix.

So I think it's untimely. I think it's unfair. I don't think that it's necessarily material to the evidence presented, to the arguments made or to be made in the hearing. And it would be also improper to strike testimony related to his confirmation of his -- and his direct personal knowledge.

CO-HEARING OFFICER DODUC: I will address the "untimely" part of your response, Ms. Wehr.

It actually is timely. We did provide instruction to the parties to not submit anything in writing prior to presentation of testimony at the hearing. So Ms. Morris was following our orders in terms of presenting her oral objections.

With respect to the remainder of your response, Ms. Wehr, I would tend to agree unless,

Ms. Morris, you can shed additional light onto it. 2 MS. MORRIS: Sure. I would just -- the two 3 citations that Ms. Wehr pointed to are just citations 4 back to evidence that's already in the record by GWD. 5 And then on Page 7, it's again evidence that was Kristen White's oral testimony and just that it hasn't 6 7 changed. So, again, all of this entire document is 8 9 really a legal brief comparing and contrasting 10 evidence, and it doesn't provide any new evidence on 11 rebuttal. 12 CO-HEARING OFFICER DODUC: What I would like 13 to do is to -- I'm not a lawyer, so I'm trying to 14 figure out the best way to say this -- is take your 15 motion to strike, Ms. Morris, under consideration but 16 applying it to weighing the evidence. So instead of 17 striking it, I'm going to allow Mr. Ortega to make his 18 direct testimony, to keep the statements in his 19 testimony, but we will weigh it accordingly. 2.0 With that, is there any -- okay. 21 Not on that, sorry, but there's something 22 else. All right. 23 MR. HERRICK: John Herrick, South Delta 24 parties. I apologize for being a non sequitur here. 25 I misinterpreted e-mail to me. I believe

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Contra Costa County and Water Agency are requesting 20
 2
    minutes of cross on the LAND witnesses. I apologize.
 3
     I thought they were telling me how long their rebuttal
 4
     would take.
 5
              CO-HEARING OFFICER DODUC: And which group is
     that group number, please?
 6
 7
              MR. HERRICK: The cross will be on group --
     order of Groups 19, 24, and 45. They are Group 25,
 8
 9
     Contra Costa.
10
              CO-HEARING OFFICER DODUC: They are Group 25,
11
     requesting how much?
12
              MR. HERRICK: 20 minutes.
13
              CO-HEARING OFFICER DODUC: 20 minutes.
14
              MR. HERRICK: I apologize for misinterpreting
15
     the instruction. Thank you.
16
              CO-HEARING OFFICER DODUC: All right.
17
              MS. DES JARDINS: Just one addition. CSPA,
18
     Group 13, 14, would like to reserve up to 20 minutes
19
     of -- it got confused that PCFFA had been mentioned.
2.0
              CO-HEARING OFFICER DODUC: I did not hear that
21
     at all.
              MS. DES JARDINS: Deirdre Des Jardins, Group
22
23
          I would like to clarify that I'm also requesting
     20 minutes for CSPA Group 13, then CSPA second group.
24
              CO-HEARING OFFICER DODUC: Which CSPA?
25
```

MS. DES JARDINS: CSPA has two groups. 1 One is 2 Tom Cannon and Chris Shutes, which did I request time 3 The other is Tim Stroshane and Brandon Nakagawa. 4 And we'd like to request 20 minutes for that group. 5 CO-HEARING OFFICER DODUC: All right. finally, Ms. Wehr and Mr. Ortega. 6 7 RICARDO ORTEGA, 8 called as Part 2 Rebuttal witness by 9 Protestant Grassland Water District, having been previously duly sworn, 10 11 was examined and testified further as 12 hereinafter set forth: DIRECT EXAMINATION BY MS. WEHR 13 14 MS. WEHR: Thank you. Good afternoon. 15 Mr. Ortega, can you introduce your name and title? 16 WITNESS ORTEGA: Yes. My name is Ricardo 17 I'm the general manager of Grassland Water Ortega. 18 District, and we deliver water supply to 90 percent of 19 the South of Delta CVPIA Refuge habitat. 2.0 MS. WEHR: And have you previously taken the 21 oath and established your qualifications in this 22 hearing? 23 WITNESS ORTEGA: I have. 24 MS. WEHR: Can you confirm that Exhibit GWD-22 25 is a true and correct copy of your rebuttal testimony?

WITNESS ORTEGA: Yes, it is.

2.0

MS. WEHR: Thank you. Please proceed.

WITNESS ORTEGA: Okay. Thank you.

The testimony provided by DWR and Reclamation clearly states that the modeling assumes that refuge water allocations will continue to be based on Shasta critical criteria and that refuge water will be allowed to move through the tunnels.

Despite this testimony, I've found nothing in the mitigation measures and the WaterFix operating criteria or the CEQA or NEPA documents that requires this. Instead, Reclamation has informed us that it will not participate in WaterFix project, that there is no plan or funding to guarantee that refuge water will be allowed to move through the tunnels, and that mitigation will be necessary at some point in the future to protect refuge water supplies. That does not inspire confidence.

CO-HEARING OFFICER DODUC: Mr. Ortega, if you could please hold on. Mr. Berliner is rushing to the microphone.

MR. BERLINER: This testimony is not summarizing his testimony. There is no discussion in his testimony of NEPA or CEQA or position of Reclamation regarding the project. This is all new

information. On that basis, I object. 2 CO-HEARING OFFICER DODUC: Ms. Wehr. 3 MS. WEHR: I disagree. On Page 5 of 4 Mr. Ortega's testimony, it clearly addresses the 5 EIR/EIS, which is a CEQA/NEPA document. CO-HEARING OFFICER DODUC: 6 I'm sorry. Could 7 we go there, please. We're looking at Mr. Ortega's 8 testimony, Page 5. Ms. Wehr? 9 If you scroll down to Lines 16 MS. WEHR: 10 through 17, for example, characterizing the CEQA/NEPA 11 document, it characterizes that document as stating 12 that there are no new adverse impacts to water 13 supplies, no further mitigation. That's essentially 14 what Mr. Ortega is summarizing right now. He has not 15 seen in any CEQA or NEPA document any mitigation or any 16 requirements to meet refuge water supplies. 17 Throughout Mr. Ortega's testimony, he also 18 describes, for instance, on Page 7, Lines 14 through 19 18, that Reclamation issued a letter to all contracts, 2.0 including to himself, about the uncertainties of his 21 participation in WaterFix and that, to his knowledge, 22 Reclamation has not changed its position after issuing 23 that letter. I don't think this is an improper summary 24 of his testimony. 25 CO-HEARING OFFICER DODUC: Are you reading the

1	same thing that I am, Mr. Berliner?
2	MR. BERLINER: I think I am. Just to clarify,
3	I'm looking at Lines 14 to 17 on Page 7, which
4	mentions this is a reference to the modeling and
5	then to Exhibit 21, GWD-21, correct, which is the
6	letter.
7	MS. WEHR: Correct.
8	MR. BERLINER: With respect to my latter part
9	of the objection, I'll withdraw that.
10	With respect to CEQA/NEPA on the prior
11	reference, all it merely does is echo what's already
12	been stated by other parties. It doesn't offer any new
13	information.
14	CO-HEARING OFFICER DODUC: That's the same
15	objection that Ms. Morris made.
16	MR. BERLINER: Well
17	CO-HEARING OFFICER DODUC: So it will go to
18	weight.
19	MR. BERLINER: not quite, no. I wasn't
20	moving to strike that.
21	CO-HEARING OFFICER DODUC: I'm sorry. Could
22	someone move that chair away from Mr. Berliner? He
23	looks so uncomfortable.
24	MR. BERLINER: It wasn't that bad. Thank you.
25	CO-HEARING OFFICER DODUC: If we could go back

to, then, Page 35, Mr. Hunt. 2 And what line was that again, Ms. Wehr? 3 MR. BERLINER: 14. 4 CO-HEARING OFFICER DODUC: Okay. 5 MR. BERLINER: This is -- on Line 14 through 6 the end of the page is simply a restatement of what was 7 said as part of -- as part of the Supplemental EIR/EIS 8 statement. That's all it is. It's just in essence 9 observation of the length and the quote from the 10 document. It's not in the testimony. 11 He was going -- as I understood where he was going, it was going beyond this. 12 13 CO-HEARING OFFICER DODUC: Mr. Ortega --14 MR. BERLINER: I could be mistaken. 15 CO-HEARING OFFICER DODUC: If you could repeat 16 that first part of the last statement you just made. 17 WITNESS ORTEGA: Sure. Despite their 18 testimony, I found nothing in the mitigation measures 19 in the WaterFix operating criteria in the CEQA or NEPA 2.0 documents that requires this. Instead, Reclamation --21 CO-HEARING OFFICER DODUC: I'm sorry. 22 you say "requires this," you're referring to? 23 WITNESS ORTEGA: To maintaining the Shasta 24 criteria as it relates to the delivery of refuge water 25 supply.

MR. BERLINER: And in my review of that language, that's not what it says. This is simply an observation that no new adverse water supply impacts have been identified and thus no further mitigation is necessary, and then it quotes from the document.

MS. WEHR: If I could --

2.0

MR. BERLINER: Now -- I'm sorry.

MS. WEHR: I can just add I think the purposes -- the purpose of Mr. Ortega's testimony is to in part respond to your request, Chair Doduc, or Hearing Officer Doduc, about wanting to know what conditions, or permit terms and conditions Grassland Water District would accept in an effort to resolve its protest.

On Page 8 of Mr. Ortega's testimony, Lines 3 through 5, he states that the new Supplemental EIR/EIS ignores discrepancies regarding how the project will operate and resulting water supply impacts. That is his personal, professional expert opinion.

And it is explained below on Page 8, Lines 26 through 28, that the purpose of the terms and conditions that Grassland Water District has proposed are intended to resolve the inconsistencies, uncertainties, and omissions throughout the testimony and the EIR/EIS.

CO-HEARING OFFICER DODUC: So that statement to which Mr. Berliner objects goes towards this uncertainty and omission background that you're trying to establish, leading to the proposed terms and conditions?

MS. WEHR: Correct.

CO-HEARING OFFICER DODUC: Overruled,

Mr. Berliner.

2.0

MR. BERLINER: Thank you.

CO-HEARING OFFICER DODUC: Please proceed.

WITNESS ORTEGA: Thank you. In my experience as general manager of the Grassland Water District and as a person who oversees the delivery of refuge water supplies to over 90 percent of the South of Delta habitat, Reclamation has a long history of deprioritizing our refuge water supply needs, despite the legal mandate.

A few examples. Reclamation arbitrarily denied refuges their 20-year ability to schedule water from February into April in both water years 2016 and '18. Also in 2016, Reclamation dictated that refuges would not be able to receive their water supply until late October. We typically have demand ramping up in August, but the demand is really year-round. These animals need to drink fresh water. We need to provide

the food and resources that they maintain.

2.0

These are examples from my personal experience with Reclamation that they cannot be counted on to uphold the requirements of the law or to protect critical water supply refuges -- water supplies to refuges.

Can you pull up GWD Exhibit 23.

Okay. We have presented three very straightforward terms and conditions for the project. The fact that Reclamation has not agreed to these terms should be a sign to you how serious the threat is to wildlife. First, we would like to see that the permits require compliance with the refuge water supply requirements under federal law, Central Valley Project Improvement Act, as a condition of the project.

Secondly, require that refuge shortages are based on Shasta criterion similar -- in the same fashion that is -- the hard-coded modeling assumptions provide and not because other water supplies are prioritized within the conveyance or storage of these new facilities.

Thirdly, ensure that the refuges have equitable right to reschedule water supplies in San Luis Reservoir as we have utilized for the past 20 years.

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This concludes my testimony. Thank you.
 1
 2
              CO-HEARING OFFICER DODUC: Thank you,
 3
     Mr. Ortega.
 4
              Cross, I have DWR for 20, State Water
 5
     Contractors for 10, and Ms. Des Jardins for 20.
 6
              Ms. Aufdemberge.
 7
                               Yes, Amy Aufdemberge,
              MS. AUFDEMBERGE:
     Department of Interior. I have 10 minutes.
 8
 9
              CO-HEARING OFFICER DODUC: All right.
10
              MR. MIZELL: If I may make a request.
11
     transcript that we rely upon to accurately read what
12
     has been said by witnesses has gone down. If we can
13
     take maybe a five-minute break here.
14
              THE REPORTER: Two minutes.
15
              MR. MIZELL: Two-minute break to get that back
16
     up.
17
              CO-HEARING OFFICER DODUC: Five is actually a
     nice round number. So we will reconvene at 2:30.
18
19
              (Recess taken)
2.0
              CO-HEARING OFFICER DODUC: All right. We're
21
     ready?
22
              Ms. Aufdemberge, I see your nameplate, so. .
23
               CROSS-EXAMINATION BY MS. AUFDEMBERGE
24
              MS. AUFDEMBERGE: Hello, Mr. Ortega. My name
25
     is Amy Aufdemberge. I'm an attorney with the
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Department of Interior in the Solicitor's Office here
 2
     in Sacramento. I represent the Bureau of Reclamation
 3
     in this hearing.
 4
              So you -- your testimony, you've requested
 5
     water right conditions about CVPIA requirements; is
     that correct?
 6
              WITNESS ORTEGA: Correct.
              MS. AUFDEMBERGE: Are you familiar with CVPIA
 8
 9
     Section addressing the Central Valley Refuges?
10
              WITNESS ORTEGA: I am.
11
              MS. AUFDEMBERGE: That section requires the
12
     Secretary of Interior to provide certain water supplies
13
     to the Central Valley refuges, correct?
14
              WITNESS ORTEGA: It does.
15
              MS. AUFDEMBERGE: And the Secretary, through
     the Bureau of Reclamation, supplies this water pursuant
16
17
     to federal contracts; is that correct?
              WITNESS ORTEGA:
18
                               It does.
19
              MS. AUFDEMBERGE: And in GWD-17 -- if we can
     pull that up.
2.0
21
              You've included these contracts as an exhibit,
22
     correct?
23
              WITNESS ORTEGA: Correct.
24
              MS. AUFDEMBERGE: You're familiar with these
25
     contracts?
```

WITNESS ORTEGA: Yes.
MS. AUFDEMBERGE: Does your contract do
these contracts I understand there's three contracts
in GWD-17, correct?
WITNESS ORTEGA: Yes.
MS. AUFDEMBERGE: Do these contracts
include with Reclamation include shortage
provisions?
WITNESS ORTEGA: They do.
MS. AUFDEMBERGE: Does your contract define
"critically dry year" based on Shasta inflow?
WITNESS ORTEGA: It does.
MS. AUFDEMBERGE: Do the shortage provisions
allow for shortages only in Shasta critically dry
years?
WITNESS ORTEGA: Yes.
MS. AUFDEMBERGE: Do the contracts with
Reclamation mention rescheduled water?
MR. ORTEGA: I believe so, yes.
MS. AUFDEMBERGE: Can we go to Article 3(e).
We'll just use the first contract. It's on
Page 8 [sic]. I'm sorry. That's paginated 8. That's
it.
Starting there on Line 198 on this page, can
you read that for me, please.

1	WITNESS ORTEGA: "In order to maximize water
2	available to refuges and better manage such water, the
3	contractors may request, with the contracting officer's
4	permission, to reschedule a portion of the Level 2
5	water supplies and/or a portion of the Incremental
6	Level 4 water supplies made available to the contractor
7	for use within the contractor's boundary during the
8	current water year for use within the subsequent year."
9	Would you like me to keep going?
10	CO-HEARING OFFICER DODUC: No, let's not.
11	MS. AUFDEMBERGE: Or just read the rest to
12	yourself, please.
13	This section requires the refuges to request
14	permission from Reclamation, is that correct, for
15	scheduling?
16	WITNESS ORTEGA: Yes.
17	MS. AUFDEMBERGE: And this contract says that
18	Reclamation only may allow rescheduling; is that
19	correct?
20	WITNESS ORTEGA: Yes.
21	MS. AUFDEMBERGE: Thank you. No further
22	questions.
23	CO-HEARING OFFICER DODUC: Thank you,
24	Ms. Aufdemberge.
25	MR. BERLINER: My cross-examination is limited

to a question about 2016 shortages and the three 2 requested permit terms. 3 Good afternoon, Mr. Ortega. my name is Tom 4 Berliner. I'm an attorney for the Department of Water 5 Resources. Nice to meet you. You made a comment during your summary of your 6 7 testimony about shortages in 2016. I was curious where in your testimony you discuss that. I did not see it 8 9 in your written testimony. 10 WITNESS ORTEGA: I'm not positive as to where. 11 I don't have it in front of me. 12 MR. BERLINER: Do you have a copy of your 13 written testimony with you today? WITNESS ORTEGA: Yes. 14 15 It looks as if I did not identify specifically 16 the 26-year timing problems that we were facing. 17 MR. BERLINER: On that basis, I'd like to 18 request that that part of his summary of his testimony 19 be stricken from the record. 2.0 CO-HEARING OFFICER DODUC: Ms. Wehr. 21 MS. WEHR: If it is true that it is not in his 22 written testimony, I would say that Mr. Ortega was 23 given an example of the risks that he sees in the 24 inconsistencies and omissions in the testimony. There was extensive testimony in the direct 25

portion of this Phase 2 hearing about shortages that 2 occurred in 2016. So to the extent it was just an 3 example that he has already given before, you know, if 4 it really needs to be stricken and it's very important 5 to Mr. Berliner, we'll accept that. CO-HEARING OFFICER DODUC: Then it's stricken. 6 7 MR. BERLINER: Thank you. 8 Mr. Ortega -- Mr. Hunt, could we pull up 9 GWD-23, please. Mr. Ortega, on Page 8 of your testimony, you 10 11 paraphrase the three conditions that you're requesting. 12 So just consistent with your paraphrasing of them, so I 13 don't have to read the whole thing, as I understand 14 that, the -- and I'm on Line 18 of Page 8 -- that the 15 first of the conditions that you would like requires 16 Reclamation to ensure that the diversions or 17 re-diversions of CVP water made in compliance with the 18 Level 2 requirements under CVPIA, correct? 19 WITNESS ORTEGA: Yes. 2.0 MR. BERLINER: And just to be clear on the 21 record, when you refer to Level 2, to what are you 22 referring? 23 Specifically for our WITNESS ORTEGA: 24 contracts, it's 125,000 acre-feet. For the total South 25 of Delta refuge supply, it's a little north of 250,000

acre-feet.

2.0

MR. BERLINER: And "Level 2" refers to what?

WITNESS ORTEGA: It is based on the historic use of water supply for these refuge areas.

MR. BERLINER: And what is the difference between Level 2 water and Level 4 water?

WITNESS ORTEGA: So Level 2 water basically comes out of CVP yield, as where incremental Level 4 is acquired on the open market. The combination of Level 2 water and incremental Level 4 water cumulatively equal Level 4 water supplies.

Level 4 water supply is the total need and our total contractual amount. In our case with Grassland Water District, that equals 180,000 acre-feet.

MR. BERLINER: Thank you.

You indicated you're familiar with Section 3406(d) of the CVPIA. And with regard to the Level 2 condition that you're asking for, in your view, is this more of a -- a right than you would be entitled to under CVPIA?

WITNESS ORTEGA: I think it is a right that is established under CVPIA, but now that, you know, this new project is being proposed, I think it could have implications on Reclamation's ability to continue to meet those obligations.

1	MR. BERLINER: And in your view, does
2	Reclamation have the firm obligation to meet Level 2
3	supplies?
4	WITNESS ORTEGA: Yes.
5	MR. BERLINER: So in your view, does the
6	WaterFix project CWF H3+ exculpate Reclamation from
7	that obligation?
8	WITNESS ORTEGA: It does not, but I think it
9	does make it more difficult to meet those refuge needs
10	and requirements, especially South of the Delta.
11	MR. BERLINER: Is Reclamation [sic] first
12	priority to which Reclamation supplies water along with
13	the Exchange Contractors?
14	Ms. WEHR: Do you mean refuges?
15	MR. BERLINER: Refuges. I'm sorry. Maybe I
16	misspoke.
17	WITNESS ORTEGA: Can you repeat the question.
18	MR. BERLINER: Sure. Part of the is the
19	Grassland Water District one of the first priorities,
20	along with the Exchange Contractors, to which
21	Reclamation provides water South of the Delta?
22	WITNESS ORTEGA: I think that's that's
23	really a timing issue. The vast majority of the water
24	need for the refuges occurs in the fall and winter,
25	where the agricultural demand from the Exchange

Contractors is really a spring-summer peak demand. 2 So when you say "first," are you referring to 3 timing? 4 MR. BERLINER: No. I'm referring to priority. 5 If there's water available to Reclamation, does the water go first to the refuges and the Exchange 6 7 Contractors? 8 WITNESS ORTEGA: I think it goes first to the 9 Exchange Contractors in practice. We have been kept, 10 from an allocation perspective, at -- at an unequal 11 level, but obviously we're dealing with vastly 12 different sizes of water blocks. 13 MR. BERLINER: But you're kept an equal level with the Exchange Contractors? 14 15 WITNESS ORTEGA: We have to date -- on just the Level 2. 16 17 MR. BERLINER: So just to clarify, the 18 condition that you are seeking from the Water Board 19 would be somehow a greater level of assurance of Level 2.0 2 refuge water than you -- in your view, you're 21 entitled to under CVPIA, if I understand correctly? 22 MS. WEHR: Objection. That completely 23 misstates Mr. Ortega's testimony. I don't believe he 24 has stated that he is asking for a greater level of 25 protection than the refuges currently enjoy under the

CVPIA.

2.0

witness ORTEGA: I would like for it to be maintained. I'm not asking for anything out of this project, just not to be harmed.

MR. BERLINER: Thank you. I appreciate that clarification.

And under 3406(d) Subpart 5, which provides in part that the Secretary of the Interior is authorized and directed to construct or acquire from nonfederal sources, water conveyance facilities or capacity, are you familiar with that provision?

WITNESS ORTEGA: Yes.

MR. BERLINER: And that's as necessary to implement their -- the requirements for the delivery of Level 2 water, correct?

WITNESS ORTEGA: For both. So cumulatively for Level 4. But yes, that would encompass all of Level 2.

MR. BERLINER: And there is a condition under Subpart 5 that you're aware of, are you not, that would prohibit the Secretary from using --

MS. WEHR: Objection. This goes beyond the scope of Mr. Ortega's rebuttal testimony. It also calls for legal analysis or interpretation of statutory provisions. Mr. Ortega's not a lawyer. So I would

just object that this is going well beyond the scope of his rebuttal.

2.0

CO-HEARING OFFICER DODUC: Mr. Berliner.

MR. BERLINER: Well, this whole proceeding concerns the California WaterFix, which is a facility that runs through the Delta. And I'll offer an offer of proof that, under Subpart 5 it states, and I'll quote, that the "Secretary is authorized and directed to construct" -- I'm sorry -- "Secretary is authorized and directed to construct or acquire from nonfederal entities such water conveyance facilities, conveyance capacity, and wells as are necessary to implement the requirements of this subsection, provided that such authorization shall not extend to conveyance facilities in or around the Sacramento's San Joaquin Delta Estuary."

This facility, this proceeding is about exactly that, which is -- which Reclamation is prohibited, by my understanding of this language, from engaging in to deliver these refuge supplies.

MS. WEHR: I will renew my objection. If Mr. Berliner is apparently now, in cross-examination on rebuttal, appears to wish to draw into this hearing, wishes to argue the legal points and interpretations of Section (d)(5), 3406(d)(5), we can do that in closing

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briefs.
 2
              CO-HEARING OFFICER DODUC: Sustained.
 3
              MR. BERLINER: Well, as I look at these
 4
     conditions, these conditions appear to go directly to
 5
     the WaterFix project, and I'm asking it in that
     context. So the terms -- the terms and conditions were
 6
 7
     proposed now.
              CO-HEARING OFFICER DODUC:
 8
                                         Yes.
 9
              MR. BERLINER: So we're allowed to
10
     cross-examine on the terms and conditions.
11
              CO-HEARING OFFICER DODUC: Yes.
12
              MR. BERLINER: So --
13
              CO-HEARING OFFICER DODUC: To the extent that
14
     Mr. Ortega can answer.
15
              MR. BERLINER: Yes, I understand. So I was
16
     asking for his understanding. I'm not asking for a
17
     legal analysis. Mr. Ortega responded at the beginning
18
     of cross-examination that he was familiar with
19
     Section 3406(d). 3406(d) includes Subpart 5, and
2.0
     Subpart 5 --
21
              CO-HEARING OFFICER DODUC:
                                          Hold on.
22
              MR. BERLINER: -- contains this prohibition.
23
              CO-HEARING OFFICER DODUC: Which prohibition
24
     are you talking about?
25
              MR. BERLINER:
                             That the -- my words, not the
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words of the statute, that Reclamation would be
 2
     prohibited from using a Delta facility to meet the
 3
     Level 2, Level 4 needs.
 4
              MS. WEHR:
                         Objection.
                                     That mischaracterizes
 5
     even the plain language of the statute. It also
    mischaracterizes the language of the proposed terms and
 6
 7
     conditions which do not require Reclamation to
 8
     construct or divert through the new facilities a refuge
 9
             It simply requires as a condition of
     water.
10
     Reclamation's permit for the CVP that it comply with
     the law. We looked at these conditions as narrowly as
11
12
    possible to be as practical and reasonable as possible.
13
              CO-HEARING OFFICER DODUC:
                                          This sounds
14
     remarkably more and more like legal arguments.
15
              Mr. Berliner, if you would help me by
16
     directing me to -- I assume you're focusing on that
17
     first proposed term?
18
              MR. BERLINER:
                             Yes.
19
              CO-HEARING OFFICER DODUC: Okay. And where
2.0
     does 3406(d)(5) come into this?
21
              MR. BERLINER: So 2406(d) Sub (5) provides
22
     that the Secretary's authorization and direction about
23
     acquiring or constructing facilities --
24
              CO-HEARING OFFICER DODUC: Mr. Berliner, stop.
25
              MR. BERLINER: -- water conveyance
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facilities --
 2
              CO-HEARING OFFICER DODUC:
                                         Stop. I'm looking
 3
     at proposed Condition 1.
 4
              MR. BERLINER: Yes.
 5
              CO-HEARING OFFICER DODUC: I don't see
     3406(d)(5) being mentioned. So are you trying to
 6
 7
     explain to me how, I hope, 3406(d)(5) relates to this
 8
    proposed term?
              MR. BERLINER:
 9
                             Correct.
10
              CO-HEARING OFFICER DODUC:
11
              MR. BERLINER: Yes. So that subpart prohibits
12
     the Secretary from using a Delta facility to meet these
13
     requirements, so. . .
              MS. WEHR:
14
                         That language is not included in
15
     Section (d)(5), Mr. Berliner. I renew my objection.
16
              CO-HEARING OFFICER DODUC: Okay. Enough.
17
              MR. BERLINER: I'm actually just reading.
18
              CO-HEARING OFFICER DODUC: Enough, enough.
19
    Mr. Berliner, you're not testifying.
2.0
              So what is your question?
21
              MR. BERLINER: So my question --
              CO-HEARING OFFICER DODUC:
22
                                         Is your question
23
     about Mr. Ortega's testimony, i.e., the proposed term,
24
     or is it about 3406(d)(5)?
25
              MR. BERLINER: It is about the term that's
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being requested in light of the proviso under
 1
 2
     3406(d)(5) and his understanding.
 3
              CO-HEARING OFFICER DODUC: Mr. Ortega --
 4
              Hold on, hold on.
 5
              Are you familiar with 3406(d)(5)?
 6
              WITNESS ORTEGA: Not intimately.
 7
              MR. BERLINER: I was just responding to -- he
 8
     said he was familiar with it, and this is just one of
 9
     the subparts.
              CO-HEARING OFFICER DODUC: And now he says
10
11
     he's not.
12
              MR. BERLINER: I'll move on.
13
              CO-HEARING OFFICER DODUC: Please.
14
              MR. BERLINER: With regard to the second, you
15
     would like the Board to adopt a condition that would
16
     prohibit, as I understand it, a reduction due to
17
     conveyance limitations in the Delta that would be
18
     caused or would result from diversions through the
19
     California WaterFix facilities, correct?
2.0
              WITNESS ORTEGA: Correct.
21
              MR. BERLINER: If the shortage is based on
22
     lack of availability of water as opposed to any other
23
     reason, you're not suggesting that that should
24
     prohibited as a condition of shortage, correct?
25
              WITNESS ORTEGA: Can you clarify "lack of
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availability of water"? 2 MR. BERLINER: Hydrologic circumstances that 3 would prevent delivery of your --4 WITNESS ORTEGA: The only shortage provision 5 that we have is tied to the Shasta index. So anything that's occurring within the Delta, especially this new 6 7 facility, I think should be held accountable for any additional harm. 8 9 MR. BERLINER: So in essence, to sort of 10 paraphrase that, you want to make sure that your water 11 supply is as it would be if the WaterFix project did 12 not exist, correct? 13 WITNESS ORTEGA: Correct. 14 MR. BERLINER: So sort of a "with and without" 15 test, correct? In other words, if your water supply 16 was reduced because of the WaterFix, you don't want 17 that to occur; and if it would have occurred without 18 the WaterFix, based on natural conditions, then that's 19 consistent with operations today? 2.0 WITNESS ORTEGA: To the -- you know, within 21 the shortage provision of up to 25 percent, yes. 22 MR. BERLINER: Thank you. 23 In your view, that's a right, that's 24 consistent with your rights as provided under CVPIA 25 today, correct?

1	WITNESS ORTEGA: Correct.
2	MR. BERLINER: So this permit condition then,
3	essentially, that you're asking for is to say is to
4	echo what exists under federal law; is that right?
5	WITNESS ORTEGA: Correct.
6	MR. BERLINER: Your third condition asks for
7	an equal opportunity to reschedule water in San Luis
8	Reservoir. Are you asking for a provision that is not
9	dependant on approval by the Secretary?
10	MS. WEHR: Could you clarify that?
11	MR. BERLINER: Sure.
12	MS. WEHR: When that approval would be
13	required or not?
14	MR. BERLINER: Sure.
15	As you were being cross-examined earlier by
16	Ms. Aufdemberge on the rescheduling provision, it
17	states that approval of the Secretary is required.
18	As I read the third condition, my
19	understanding, that would be because there's no
20	definition of an "equitable opportunity."
21	And maybe I'll ask you, does the equitable
22	opportunity is that contingent on approval by the
23	Secretary?
24	WITNESS ORTEGA: By the contracting officer at
25	Reclamation, yes.

MR. BERLINER: So are you asking for a 1 2 provision from the Board that would increase the rights 3 that you have under your existing contract? 4 WITNESS ORTEGA: I am not. I am simply trying 5 to state the fact that a new block of water will be 6 introduced into San Luis Reservoir and the potential 7 for our supply to be displaced or de-prioritized is 8 high. 9 And we've seen this occur in 2016 and in 2018, 10 so the condition exists. It's tough already; this 11 project is going to make it tougher, and so -- to the 12 degree that this project is going to further impact our 13 ability to reschedule water, given still the authority 14 and the approval that's required under our contracts and under CVPIA. 15 16 MR. BERLINER: Are your rights to reschedule 17 or your opportunity, I should say, to reschedule water 18 today determined by, to use your phrase, a contracting 19 officer? 2.0

WITNESS ORTEGA: Yes. We make a request, and they either approve or deny.

MR. BERLINER: And are there guidelines that are set forth each year as to what rescheduling will be allowed?

WITNESS ORTEGA: There are.

21

22

23

24

25

1	MR. BERLINER: And in 2016, if I understand
2	your response from a moment ago, some rescheduling
3	opportunity was decreased as a result of some other
4	water that was in San Luis Reservoir on the federal
5	side; is that right?
6	WITNESS ORTEGA: It was denied. It was not
7	decreased.
8	MR. BERLINER: And do you know why it was
9	denied?
10	WITNESS ORTEGA: I can't speak to the
11	rationale of Central Valley operations or the
12	contracting officer.
13	MR. BERLINER: Did they tell you why they were
14	denying it?
15	WITNESS ORTEGA: No. They simply said that
16	the request was denied.
17	MR. BERLINER: And for 2018, your opportunity
18	was decreased; is that correct?
19	WITNESS ORTEGA: No. It was denied.
20	MR. BERLINER: Denied. And do you know why?
21	WITNESS ORTEGA: No.
22	MR. BERLINER: Was it was your opportunity
23	allowed in 2017?
24	WITNESS ORTEGA: 2017, we had a full Level 4
25	supply, and so there was no need to reschedule water

supply. But for the previous 20 years, we have 2 utilized this tool. 3 End of the day, Reclamation holds a lot of 4 discretion as to how they move our water, if they allow 5 us to carry over that supply despite the longstanding unmet mandate. 6 MR. BERLINER: And does Reclamation deny 8 rescheduling opportunities to agricultural water 9 service contractors South of the Delta? 10 WITNESS ORTEGA: I'm not aware of them denying 11 any ag requests. They, however, may be reduced in 12 certain year types. I am aware that there has been a 13 historic cap under certain hydrologic conditions. 14 MR. BERLINER: And is the ability to 15 reschedule subject to, for instance, Warren Act water 16 being stored in San Luis? 17 WITNESS ORTEGA: I can't speak to that. 18 MR. BERLINER: What about water transfer 19 water, can you speak to that? 2.0 WITNESS ORTEGA: No. 21 MR. BERLINER: Are you aware that there are 22 priorities for stored water in San Luis Reservoir? 23 WITNESS ORTEGA: Yes. 24 MR. BERLINER: And do you know what priority rescheduled water has? 25

1	WITNESS ORTEGA: Relative to?
2	MR. BERLINER: To other federal water in the
3	reservoir.
4	WITNESS ORTEGA: Depending on the year.
5	MR. BERLINER: What about 2018?
6	WITNESS ORTEGA: So rescheduling of 2017 into
7	2018?
8	MR. BERLINER: Yes.
9	WITNESS ORTEGA: I can't recall the
10	rescheduling guidelines off the top of my head.
11	MR. BERLINER: What about 2018 to 2019, are
12	you familiar with the proposed guidelines?
13	MR. ORTEGA: I'm not even sure that they're
14	out so, no, I'm not familiar.
15	MR. BERLINER: Okay. I have no further
16	questions.
17	CO-HEARING OFFICER DODUC: Thank you,
18	Mr. Berliner.
19	Ms. Morris.
20	CROSS-EXAMINATION BY MS. MORRIS
21	MS. MORRIS: Good afternoon.
22	WITNESS ORTEGA: Good afternoon.
23	MS. MORRIS: I just have a couple quick
24	questions. I estimated 20 minutes. I don't think it's
25	going to take that long.

1	Mr. Ortega, did you draft the testimony that
2	was marked as GWD-22 and now is shown as GWD-22
3	Revised?
4	WITNESS ORTEGA: I did.
5	MS. MORRIS: Did you have help from anybody?
6	WITNESS ORTEGA: Our general counsel,
7	Ms. Wehr, did help me review.
8	MS. MORRIS: And did you pull the citations to
9	all the transcripts and exhibits listed in your
10	testimony?
11	WITNESS ORTEGA: I had assistance with
12	Ms. Wehr, yeah.
13	MS. MORRIS: Did you review all the portions
14	of the transcripts and exhibits that you cited in your
15	testimony?
16	WITNESS ORTEGA: I did.
17	MS. MORRIS: And looking at GWD-22 Revised on
18	Page 2, Line 14 I'll pause for a minute while it
19	gets pulled up.
20	So, again, looking at Page 2, Line 14, when
21	you say "substantial risk of injury," do you mean less
22	deliveries to Grassland?
23	WITNESS ORTEGA: Yes.
24	MS. MORRIS: And specifically, less deliveries
25	to Grassland because of California WaterFix?

1 WITNESS ORTEGA: I think it extended beyond 2 Grassland to all South of Delta refuges, but, yes. 3 MS. MORRIS: And you state that the 4 Supplemental EIR/EIS represents a substantial risk of 5 injury to San Joaquin Valley wildlife, public trust resources, and the public trust interest. 6 7 When you make that statement, "public trust resources and public interests, " you're speaking about 8 9 the -- in the San Joaquin Valley, correct? 10 WITNESS ORTEGA: Yes, those South of Delta 11 CVPIA refuges. 12 Thank you. Can you explain what MS. MORRIS: 13 has changed in Supplemental EIR/EIS to create this 14 substantial risk of injury? 15 And that was a bad question. So what I'm 16 really talking about is what's changed from the Final 17 EIR/EIS to the Supplemental EIR/EIS that has caused 18 this substantial risk of injury that you speak of? 19 WITNESS ORTEGA: I think that the initial EIS/EIR and the associated water-coded modeling within 2.0 21 CalSim II identified Level 2 supply as -- as not being 22 impacted and also able to move through the tunnels. 23 MS. MORRIS: So there's no change between the 24 Final EIR/EIS and the Supplemental EIR EIS, correct? 25 WITNESS ORTEGA: I have no idea if there's no

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change between two massive environmental documents.
 2
              MS. MORRIS: Okay. Well, I'm trying to
 3
     understand the basis of your statement because you say
 4
     that the Supplemental EIR/EIS presents a substantial
 5
     risk. And then you also say --
              WITNESS ORTEGA: I think what's changed is
 6
 7
     that Reclamation has indicated that they are not going
 8
     to participate financially in the project, so we are
 9
     left with uncertainty that, okay, how -- how is it that
10
     our supplies are not going to be impacted?
11
              MS. MORRIS: Where in the Supplemental EIR/EIS
12
     does it say anything about CVP not participating?
13
     you cite that in your testimony?
14
              WITNESS ORTEGA: No. No, it's a correction.
15
     It was -- I'm referring to the letter issued by
     Reclamation.
16
17
              MS. MORRIS: I don't have any other questions.
18
     Thank you for your time.
              CO-HEARING OFFICER DODUC: Thank you,
19
2.0
     Ms. Morris.
21
              And I do not see Ms. Des Jardins, and
22
     apparently she has informed Mr. Herrick that she does
23
     not wish to conduct cross.
24
              Any redirect, Ms. Wehr?
25
              MS. WEHR: Yes, please.
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CO-HEARING OFFICER DODUC: And what topic? 1 2 I've learned my lesson from Mr. Bezerra. I'm 3 very careful when allowing for redirect. 4 MS. WEHR: I would like to ask some follow-up 5 redirect questions about the shortage provision in the contract that Ms. Aufdemberge asked Mr. Ortega about; 6 7 the firm obligation under CVPIA that Mr. Berliner asked Mr. Ortega about; and the rescheduling guidelines that 8 9 Mr. Berliner asked Mr. Ortega about. 10 CO-HEARING OFFICER DODUC: All right. 11 MS. WEHR: Should I move to --12 CO-HEARING OFFICER DODUC: No, just stay right 13 there. 14 MS. WEHR: Okay. REDIRECT EXAMINATION BY MS. WEHR 15 16 MS. WEHR: Mr. Ortega, you were asked about 17 the shortage provisions in the Shasta criteria in your 18 contract by Ms. Aufdemberge. And I think the 19 implication is "thems the rules" and Reclamation's got 2.0 to follow. 21 Have you experienced examples of shortages in 22 either your total supply or your scheduled deliveries 23 of water that are not based on the Shasta criteria or 24 the letter of the shortage provisions in your 25 contracts?

1	WITNESS ORTEGA: Yes.
2	MS. WEHR: Are there examples of such
3	shortages being imposed on your water supply or your
4	schedule of deliveries that were imposed in years when
5	you were not at a Shasta critical shortage condition?
6	WITNESS ORTEGA: Yes. In 2016, it was
7	declared a non-critical year, and there's a major
8	bottleneck in the Delta that precluded our ability to
9	flood up on the schedule that the habitat requires.
10	MS. WEHR: So you were asked to defer your
11	otherwise required deliveries of water?
12	WITNESS ORTEGA: Yes, delay.
13	MS. WEHR: By how long?
14	WITNESS ORTEGA: Two months.
15	MS. WEHR: Are there any examples of the
16	Bureau of Reclamation making an initial decision or an
17	initial announcement that you may not be able to
18	receive all of your allocated refuge water for
19	financial reasons affecting the CVP?
20	CO-HEARING OFFICER DODUC: Hold on, please. I
21	believe Mr. Berliner has an objection.
22	MR. BERLINER: This is beyond the scope of
23	cross-examination and therefore is improper redirect.
24	He was not asked about financial conditions at all.
25	CO-HEARING OFFICER DODUC: Ms. Wehr.

MS. WEHR: Ms. Aufdemberge asked Mr. Ortega if 1 2 the shortage provisions in the contract dictated or the 3 CVPIA requirements for refuges dictated the shortages. 4 And I am eliciting examples from my client of times 5 when that was not the case to exemplify the fact that 6 the shortage conditions in the contracts are not the 7 only thing that Reclamation takes into account when it 8 allocates water to refuges. 9 CO-HEARING OFFICER DODUC: Understood. 10 Overruled, Mr. Berliner. You may recross on 11 that, if you wish. 12 So going back to example of an MS. WEHR: 13 instance when Reclamation, additionally, they 14 determined that refuges would not receive their full 15 allocation for financial reasons of the Central Valley 16 Project, can you explain what that was and what you 17 experienced? 18 WITNESS ORTEGA: Sure, sure. So, you know, 19 the allocation of water is really only half the story. 2.0 The funding that's required to wield that water is a 21 necessary component of the ultimate goal of delivering 2.2 the water supply to the habitat. 23 Depending on the cost to convey water, which 24 can fluctuate dramatically from year to year, Reclamation has a finite amount of money that they've 25

allocated within the restoration fund. So we have been 2 told in the past that they would have not only no money to acquire any incremental Level 4 but that there 3 4 wasn't adequate funding to even convey the Level 2 5 component of our supply. MS. WEHR: Thank you. Moving on to the 6 7 rescheduling guidelines, you were asked both by 8 Ms. Aufdemberge and Mr. Berliner about the provision in 9 your contract on the rescheduling guidelines. 10 Has Grassland Water District asked Reclamation 11 to allow for rescheduling as contemplated in that 12 provision of the contract? 13 WITNESS ORTEGA: Yes, in all years but 14 extremely wet years. 15 MS. WEHR: And did -- as contemplated in that contract, did Reclamation revise its rescheduling 16 17 quidelines to include refuge water as an available 18 water supply to be rescheduled in San Luis Reservoir? 19 WITNESS ORTEGA: In most years, yes. 2.0 MS. WEHR: So it's your understanding that the 21 conditions under that contract provision have been 22 triggered and met already? 23 WITNESS ORTEGA: Yes. 24 MS. WEHR: I want to explore a little bit more 25 about how those rescheduling guidelines are implemented

by Reclamation because you received some questions 2 about that. 3 Historically how and why do the refuges reschedule water into San Luis Reservoir? 4 WITNESS ORTEGA: 5 Okay. Are we going to dive into the complexity of refuge water supply? 6 MS. WEHR: In brief. General reasons why. 8 WITNESS ORTEGA: So Level 2 supply comes out 9 of yield and is fairly reliable. The Incremental Level 10 4 component is acquired from willing sellers and is 11 acquired over the course of the water year, and -- or 12 is developed over the course of the water year. 13 And so we have a lot of demand that ramps up 14 in the early spring in the months of April, May, and 15 June especially, much earlier than these acquired blocks 16 17 are -- actually come to fruition. 18 So when we, you know, have water supply at the 19 end of the water year, it really mitigates that. 2.0 allows us to carry over a small block across the water 21 year from the end of February. And then our demand 22 starts to pick up in April. 23 So that rescheduling really provides an essential tool to meet habitat needs in advance of 24 25 Reclamation's ability to acquire those blocks.

MS. WEHR: Thank you. And you were asked about why you think you need -- the refuges should receive an equitable opportunity to reschedule.

2.0

Other than years of 2016 and '18, where you described how Reclamation exercised its discretion to deny refuge water carryover rescheduling and instead allow only agricultural water rescheduling, has Reclamation provided the refuges historically with an equitable opportunity to reschedule water?

WITNESS ORTEGA: They have. And I think it's probably noteworthy that we don't carry water, you know, for an extended period or from year to year to year. We need it, you know, three months at the max after the end of the -- our water year.

MS. WEHR: And do you know whether Reclamation intends to allow that equitable opportunity continue, for example, in this water year?

WITNESS ORTEGA: We do not.

MS. WEHR: Why do you not know?

WITNESS ORTEGA: Reclamation has yet to make that determination. We have made the request, like we do in every year.

MS. WEHR: Are you aware whether Reclamation does allow rescheduling of non-project water, transfer water, as Mr. Berliner asked you?

WITNESS ORTEGA: They do. And in recent 1 2 practice, it's been exempt from any cap, San Luis 3 Reservoir. 4 MS. WEHR: You mean it's been exempt from any 5 restrictions on rescheduling? 6 WITNESS ORTEGA: Yes, yes. 7 MS. WEHR: So for example, in 2018, as I understand it, just to clarify your testimony, is that 8 9 Reclamation allowed agricultural water to be 10 rescheduled and it allowed non-project transfer water 11 to be rescheduled, but it did not allow refuge water to 12 be rescheduled in the reservoir? CO-HEARING OFFICER DODUC: 13 Hold on. 14 Ms. Morris is running for the microphone. 15 MS. MORRIS: I would just object because it 16 misstates his testimony because, when Mr. Berliner 17 asked about ag scheduling, he said he didn't know. And 18 now, all of a sudden, we have two new opinions. 19 he's recalling that there was that ability for ag. 2.0 So I think it's outside the scope. Plus I 21 think the questions mischaracterize the testimony that 2.2 was earlier provided in cross-exam. 23 CO-HEARING OFFICER DODUC: Ms. Wehr. 24 MS. WEHR: I believe Mr. Ortega testified that 25 agricultural users were allowed to reschedule in those

years. I apologize I don't have the transcript in 1 2 front of me. 3 CO-HEARING OFFICER DODUC: He's nodding. And 4 let's take this as his clarification of the answer he 5 gave to Mr. Berliner, and you may recross on it. Proceed. 6 7 Final questions, you testified --MS. WEHR: CO-HEARING OFFICER DODUC: Did he answer that 8 9 question? I think I stopped him from answering because 10 Ms. Morris was rushing up to the microphone. 11 WITNESS ORTEGA: Can you restate the question? 12 Sorry. 13 Just to clarify your testimony and MS. WEHR: 14 bring it together, your experience in 2018 was that 15 Reclamation allowed agricultural water to be 16 rescheduled in San Luis Reservoir and non-project 17 water, including water transfers, to be rescheduled in 18 San Luis Reservoir but did not allow for refuge water 19 to be rescheduled in San Luis Reservoir; is that 2.0 correct? 21 WITNESS ORTEGA: Correct. 22 MS. WEHR: And you have no idea why? 23 WITNESS ORTEGA: I do not. 24 MS. WEHR: Thank you. 25 CO-HEARING OFFICER DODUC: All right.

1	Recross.
2	RECROSS-EXAMINATION BY MS. AUFDEMBERGE
3	MS. AUFDEMBERGE: Hi, Mr. Ortega. Amy
4	Aufdemberge again with Reclamation.
5	I just have one question for you. I think you
6	testified that, in 2016, Reclamation did not short you
7	according to the Shasta criteria in your contract; is
8	that correct?
9	WITNESS ORTEGA: Correct. It was a
10	non-critical year.
11	MS. AUFDEMBERGE: Did you sue the United
12	States for breach of contract?
13	WITNESS ORTEGA: They no.
14	MS. AUFDEMBERGE: Thank you. No further
15	questions.
16	RECROSS-EXAMINATION BY MR. BERLINER
17	MR. BERLINER: I'll try to be very brief.
18	Mr. Hunt, could you please pull up GWD-19, and
19	if you could scroll down a little bit, right there.
20	Mr. Ortega, are you familiar with this
21	document?
22	WITNESS ORTEGA: Yes.
23	MR. BERLINER: Do you need to see the very top
24	of it?
25	WITNESS ORTEGA: Yeah, I would like to see the

```
1
     year.
 2
              I'm familiar with it.
 3
              MR. BERLINER: You're familiar with it.
                                                        So
 4
     this Section A is -- indicates that it's storage
 5
     priority for San Luis Reservoir. And as I understand
 6
     it, rescheduled project water is the third priority; is
 7
     that correct?
              WITNESS ORTEGA:
 8
                               Yes. Rescheduled project
 9
     water is No. 3.
10
              MR. BERLINER: And refuge water Level 2 is the
11
     first priority for storage in San Luis, correct?
12
              WITNESS ORTEGA:
                               Yes.
13
              MR. BERLINER: And Level 4 water is in second
14
     priority for refuge water, correct?
15
              WITNESS ORTEGA: When it is granted.
16
              MS. WEHR: I just want to object that it
17
     misstates the document. There are distinctions between
18
     the type of Level 2 and Level 4, specifically which
19
     year. No. 1 and 2 refer to upcoming water allocations,
2.0
     not rescheduled project water.
21
              WITNESS ORTEGA: Correct.
22
              CO-HEARING OFFICER DODUC: That's what it
23
     says, yes.
24
                             That's No. 3, correct?
              MR. BERLINER:
25
     Mr. Ortega, No. 3 is the -- it's the third priority for
```

storage in San Luis? 2 WITNESS ORTEGA: That's rescheduled project 3 water is the third priority for those that they grant 4 -- that Reclamation grants that to. 5 MR. BERLINER: So they are after Level 2 and Level 4 water for the upcoming year for the refuges? 6 7 WITNESS ORTEGA: For the upcoming year, yes. 8 MR. BERLINER: And then the refuges 9 potentially have another opportunity under rescheduled 10 as the second priority, along with municipal and 11 industrial water, correct? 12 WITNESS ORTEGA: For the upcoming water year. 13 MR. BERLINER: Correct. And the Bureau, as I 14 understand it -- or Bureau of Reclamation has granted 15 you permission to reschedule water in the last 18 out 16 of 20 years, subject to the availability of water; is 17 that not correct? WITNESS ORTEGA: Yes. 18 19 MR. BERLINER: So -- I have no further 2.0 questions. That's it. Thank you. 21 CO-HEARING OFFICER DODUC: Any other recross? 22 (No response) 23 CO-HEARING OFFICER DODUC: All right. Thank you, Mr. Ortega. At this time, does that conclude your 24 25 rebuttal, Ms. Wehr? And if so, would you like to move

1	your exhibits into the record?
2	MS. WEHR: Yes, it does. I'd like to move
3	Exhibits GWD-22 and GWD-23 into the record.
4	CO-HEARING OFFICER DODUC: Any objections?
5	(No response)
6	CO-HEARING OFFICER DODUC: Not hearing oh,
7	question.
8	MR. DEERINGER: Just a clarification for the
9	record. This is GWD-22-R?
10	MS. WEHR: Correct.
11	MR. DEERINGER: Okay. Just making sure.
12	CO-HEARING OFFICER DODUC: So moved into the
13	record.
14	(Grassland Exhibits GWD-22-R and GWD-23
15	admitted into evidence)
16	CO-HEARING OFFICER DODUC: Thank you,
17	Mr. Ortega, Ms. Wehr.
18	We have one more party that I would like to
19	get through today. And, Ms. Nikkel, are your witnesses
20	here?
21	MS. NIKKEL: Yes, they're here.
22	CO-HEARING OFFICER DODUC: How much time do
23	you anticipate needing for direct testimony?
24	MS. NIKKEL: Approximately ten minutes.
25	CO-HEARING OFFICER DODUC: Okay. Let's do

1	that if that's okay with the court reporter, because I
2	have an estimated total hour or so of cross. So let's
3	get the direct testimony. We'll take a break, and then
4	we'll come back for cross.
5	GARY KIENLEN and SHANKAR PARVATHINATHAN
6	called as Part 2 Rebuttal witnesses
7	by Protestant Group 9, North Delta
8	Water Agency, having been duly sworn,
9	were examined and testified as
10	hereinafter set forth:
11	DIRECT EXAMINATION BY MS. NIKKEL
12	MS. NIKKEL: Good afternoon. Meredith Nikkel,
13	Group 9, the North Delta Water Agency.
14	If I can have the witnesses please state their
15	names for the record.
16	WITNESS KIENLEN: Gary Kienlen.
17	WITNESS PARVATHINATHAN: Shankar
18	Parvathinathan.
19	MS. NIKKEL: And you've both taken the oath in
20	this proceeding, correct?
21	WITNESS KIENLEN: Yes.
22	WITNESS PARVATHINATHAN: Yes.
23	MS. NIKKEL: Mr. Keenlan, is Exhibit NDWA-500
24	your testimony?
25	WITNESS KIENLEN: Yes, it is.

1	MS. NIKKEL: And have you previously submitted
2	your statement of qualifications in this proceeding as
3	Exhibit NDWA-4?
4	WITNESS KIENLEN: Yes, I have.
5	MS. NIKKEL: Do you rely on Exhibits NDWA-502
6	and NDWA-503 in presenting your testimony for this
7	Part 2 Rebuttal?
8	WITNESS KIENLEN: Yes.
9	MS. NIKKEL: Dr. Shankar, is Exhibit NDWA-501
10	your testimony?
11	WITNESS PARVATHINATHAN: Yes.
12	MS. NIKKEL: Have you previously submitted
13	your statement of qualifications in this hearing as
14	Exhibit NDWA-6?
15	WITNESS PARVATHINATHAN: Yes.
16	MS. NIKKEL: And do you rely on Exhibits
17	NDWA-502 and NDWA-503 in presenting that testimony?
18	WITNESS PARVATHINATHAN: Yes.
19	MS. NIKKEL: If I could have each of you
20	summarize your testimony.
21	WITNESS PARVATHINATHAN: Thank you. My
22	testimony is based on the DSM-2 modeling performed by
23	the petitioners. But it is focused exclusively on
24	summarizing the impact to NDWA users, especially the
25	NDWA contract violations.

1 So my review focuses on two specific locations 2 in the Delta: Sacramento River at Emmaton and 3 Sacramento River at Three Mile Slough. 4 And these results -- this review is purely 5 based on the modeling by DWR or petitioners. 6 The Sacramento River at Emmaton, average EC 7 values under CWF H3+ are higher than the No Action Alternative between July and December, with the 8 9 greatest increase of 23 percent in September. 10 And to provide more detail on the temporal 11 changes in electrical conductivity, Table 1 shows 12 monthly changes in EC values of Emmaton and the CWF H3+ related to the No Action Alternative. 13 14 MS. NIKKEL: Dr. Shankar, if I could 15 interrupt. 16 Mr. Hunt, if you could please pull up NDWA-502 17 and turn to Page 2, I think it would be helpful as a 18 visual quide to the summary. 19 WITNESS PARVATHINATHAN: Thank you. Page 3, 2.0 please. 21 Using this table, this table shows monthly 22 changes in average electrical conductivity in the 23 Sacramento River at Emmaton. I will take -- show a 24 good quick example here. 25 In September of 1989, you can see the

average -- the change in EC is nearly 77 percent, the value of 1696 microsiemens per centimeter under the project as compared to the No Action Alternative.

That's the difference in the electrical conductivity, just to illustrate the magnitude of the changes under project.

Page -- next page, please.

2.0

In the Sacramento River at Three Mile Slough, average EC values under the project are higher in July and December, with the greatest increase of 20 percent.

And the next page has a table which summarizes similar information but for Sacramento River at Three Mile Slough. And my colleague, Gary Kienlen will explain in detail the results from this table in his testimony.

Page 6, next page, please.

And the Table 3 in this page presents the number of violations of NDWA contract standards at Three Mile Slough under No Action Alternative.

The 1981 contract was not met for 579 days out of 5843 days, which is the 16-year period of simulation, which is equal to nearly 10 percent violations under the No Action Alternative. And Table 4 presents similar violations under the project.

Overall, the violations increase from 579 days

under No Action Alternative to 870 days under the CWF H3+, which is an increase of 5 percent, or 292 additional days in the 16-year period of simulation.

And these results are summarized from the data provided by DWR, which is NDWA-503.

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That's it. That ends my testimony. Thank you.

WITNESS KIENLEN: As described by -- I've been practicing his name, but I'm going to use the one everybody else is using -- Dr. Shankar, NDWA-502 summarizes MBK's review of the modeling conducted by DWR to the No Action Alternative in the CWF H3+ alternative.

If we could go to Page 5, please, going back to Table 2 here. As previously identified, this table shows the average increase in electrical conductivity or EC in the Sacramento River at Three Mile Slough resulting from the CWF H3+, which is approximately 7 percent increase on average based on DWR's modeling.

In many months, as can be seen in this table, in many months, the increase in EC is much greater than the 7 percent average. Based on the modeling conducted by DWR, the greatest increases occur in November of 1979 and September of 1989, which we see increases of 80 percent and 69 percent respectively.

The red highlighting on this table for the years 1976, 1979, and 1989 show monthly increase in EC is equal to or greater than that 7 percent average in each month for five consecutive months.

As indicated in Tables 3 through 5, the increase in contract violations is as Dr. Shankar was discussing, increases for the period July through September of 1989. The increase is a total of 76 days from -- increased by 76 days to a total of 138 days during that five-month period.

That concludes my testimony.

MS. NIKKEL: Thank you.

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That concludes our direct testimony.

CO-HEARING OFFICER DODUC: All right. Let's go ahead and take our afternoon break. We will return at 3:45, upon which I believe the Department has requested 45 minutes for cross with the State Water Contractors also -- or have you coordinated that?

MR. MIZELL: I have coordinated with State
Water Contractors, and we've actually been able to
maybe get our cross down shy of 45 minutes. I'll do my
best to take your guidance and do direct questions -maybe half an hour.

CO-HEARING OFFICER DODUC: All right. Let's do that. We'll reconvene at 3:45.

1	(Recess taken)
2	CROSS-EXAMINATION BY MR. MIZELL
3	CO-HEARING OFFICER DODUC: All right. It is
4	3:45. We are back, and I will now turn to Mr. Mizell
5	and Mr. Berliner for the closing act for the day.
6	MR. MIZELL: We will try to make it short and
7	sweet. If we can bring up NDWA-500, please, my first
8	line of questioning will be for you, Mr. Kienlen.
9	So if we could go to Page 2, please, of
10	NDWA-500. I'm going to focus you initially on Lines 5
11	through 7.
12	You described your duties with MBK to include
13	contract compliance; is that correct?
14	WITNESS KIENLEN: Yes.
15	MR. MIZELL: Mr. Hunt, if we could bring up
16	DWR 306, please.
17	So, Mr. Kienlen, this is the 1981 contract
18	between DWR and NDWA referenced in your testimony; is
19	that correct?
20	WITNESS KIENLEN: Yes, it is.
21	MR. MIZELL: And you're familiar with this
22	contract?
23	WITNESS KIENLEN: Yes, I am.
24	MR. MIZELL: And your duties include
25	interpreting it; is that correct?

WITNESS KIENLEN: Yes. 1 2 MR. MIZELL: If we can bring up DWR-1400, 3 Oh, you know what? Strike that. You do not 4 have DWR-1400. It is sitting on my desk. 5 Are you aware that there was a 1997 amendment to the 1981 contract between DWR and NDWA? 6 WITNESS KIENLEN: Yes, I am. Was the extent of that amendment 8 MR. MIZELL: 9 to move the compliance location from Emmaton to Three 10 Mile Slough? 11 WITNESS KIENLEN: Yes, it was. 12 And in interpreting the contract, MR. MIZELL: 13 you would also be interpreting that amendment; is that 14 correct? 15 MS. NIKKEL: I'm going to object as vague and ambiguous on the word "interpret" and also on the basis 16 17 that it calls for a legal conclusion if the meaning of 18 the word "interpret" is to ask for a legal interpration of either the contract or the amendment. 19 2.0 MR. MIZELL: I can clarify. 21 CO-HEARING OFFICER DODUC: Please, Mr. Mizell. 22 MR. MIZELL: I'm simply looking to see if 23 Mr. Kienlen is, in his duties as -- if his duties for 24 contract compliance include contract compliance with 25 the 1997 amendment to the 1981 contract.

WITNESS KIENLEN: Well, the 1997 amendment simply moved the compliance location for the contract as is contemplated in the contract -- or was contemplated in the contract. I forget the section of the contract. But it's on Page 2, I believe, of the contract.

2.0

There were no other changes to the criteria or anything else. It was simply moving the contract compliance location a short distance upstream from Emmaton to Three Mile Slough.

MR. MIZELL: Thank you. So when you're fulfilling your duties for contract compliance purposes, you would take the 1997 amendment into consideration; is that correct?

WITNESS KIENLEN: Yes, we monitor compliance with the contract at Three Mile Slough today or since that amendment took place, as opposed to Emmaton prior to that.

MR. MIZELL: Thank you. Perfect.

If we could go back to NDWA-500, please, on Page 2, Lines 26 through 28. I'm going to focus you here on Paragraph 7 of your testimony, please.

Isn't it true that the 1981 contract between DWR and NDWA was not in existence between the years 1976 and 1981?

1 WITNESS KIENLEN: The 1981 contract was not in 2 existence, you are correct. There were prior 3 agreements between DWR and North Delta during at least 4 some of those years. I don't recall exactly which 5 ones. MR. MIZELL: And isn't it true that the 6 7 modeling results you describe here in Paragraph 7 are 8 not reflective of the protection provided to North 9 Delta Water Agency by the 1981 contract between DWR and 10 NDWA? 11 MS. NIKKEL: Objection, vague and ambiguous as 12 to not reflective of the protection provided by the 13 contract and the amendment. If Mr. Mizell could 14 clarify what he means. 15 CO-HEARING OFFICER DODUC: Mr. Mizell. 16 MR. MIZELL: Certainly. I'll try to do a 17 better job of phrasing that. 18 In your Paragraph 7, you use the term 19 "violations" of the 1981 contract; is that correct? 2.0 WITNESS KIENLEN: Yes. 21 MR. MIZELL: Is it your intention in using 22 that phrase to say that DWR has not fulfilled its 23 contractual obligations to North Delta Water Agency? 24 MS. NIKKEL: Objection, vague and ambiguous as 25 to "contract obligations." I also would object on the

grounds that this appears to be going beyond the scope of the rebuttal testimony, which is an interpretation of model results, not an interpretation or opinion regarding actual violations or compliance with the contract.

2.0

CO-HEARING OFFICER DODUC: So if I might, because it's getting later in the day, I'm reading this as -- at least I think where Mr. Mizell is going is your statement about 5 percent violation of the 1981 contract during 1976 through 1981, what do you mean by that if the 1981 contract did not exist during that period?

WITNESS KIENLEN: That's based on the analysis of the modeling results.

No, the contract was not in place. We're not talking about real-time, real conditions in here.

We're talking about what the model shows. They modeled that period from 1976 through 1991. And I see a typo in my testimony.

CO-HEARING OFFICER DODUC: So your testimony is, if the hydrology during that period that was depicted in the model were to be considered regardless of the year, that this would be the result that was shown?

WITNESS KIENLEN: Correct.

MR. MIZELL: And if I understood your answer just now, this is a statement -- your use of the word "violations" is a statement only with regard to assessment of the modeling results and not a conclusion on the protectiveness the contract; is that correct? So in other words, you're not making a legal conclusion; you're making an assessment of modeling results.

WITNESS KIENLEN: Correct.

2.0

MR. MIZELL: So you would agree with me that the results represented in Paragraph 7 are not the actual salinity experienced by members of the North Delta Water Agency but a modeling exercise; is that correct?

WITNESS KIENLEN: That's correct. The testimony is about the modeling and the results of the modeling that DWR did.

MR. MIZELL: So through your understanding of the contract, you are aware that there are payment provisions for drought years provided for in the contract; is that correct?

MS. NIKKEL: Objection, goes outside the scope of rebuttal testimony, which again is focused on the analysis of the modeling results and not terms -- other terms of the contract or interpretation of the contract

for that matter. 2 CO-HEARING OFFICER DODUC: Mr. Mizell. 3 MR. MIZELL: Yes, his characterization of even 4 modeling results as violations of a contract would 5 imply that the contract terms do not allow for a 6 reduction in water quality. Generally, we have debated the use of the term 8 "exceedances" or other non- -- well, we've generally 9 used the term exceedances. I'll leave it at that. 10 And so what I'm trying to get to is is the 11 intent of statement "violations of the 1981 contract" 12 inclusive of the entire contract, or is it essentially 13 looking only at the water quality provision of the 14 contract? CO-HEARING OFFICER DODUC: As modeled. 15 MR. MIZELL: As modeled. 16 17 CO-HEARING OFFICER DODUC: Please answer that question. 18 WITNESS KIENLEN: I think I agree with you. 19 2.0 Let me restate it just -- the interpretation is, as to 21 the water quality provisions of the contract, based on 22 the modeling results, the results of the modeling 23 conducted by DWR for that period. Does that --24 MR. MIZELL: If that's -- I'm just looking for 25 elaboration. If that's what you mean when you say

"violations of the 1981 contract" is it's limited to 2 the water quality portion of the contract, that's all. 3 WITNESS KIENLEN: Yes. 4 MR. MIZELL: Thank you. 5 If we could move to Page 3 to the top there, 6 in Paragraph 8. 7 Is it your testimony that the modeled increases described near Paragraph 8 represent 8 9 exceedance of the 1981 contract standards? 10 WITNESS KIENLEN: I believe Table 2, which is 11 referred to here, is the increase in the salinity or EC 12 from the No Action Alternative to the CWF H3+ 13 alternative. I don't believe this -- this paragraph is 14 not talking about contract exceedances or violations. 15 MR. MIZELL: And so this paragraph would not 16 necessarily represent any injuries suffered by North 17 Delta Water Agency or its members? 18 MS. NIKKEL: Objection, calls for a legal 19 conclusion, misstates the testimony. 2.0 CO-HEARING OFFICER DODUC: Sustained. 21 MR. MIZELL: When you testify in Paragraph 8 22 about increases in EC at Three Mile Slough on the 23 Sacramento River, what is the point that you're trying 24 to convey to the Board? 25 WITNESS KIENLEN: The point is that there's

been testimony in this proceeding that says that the average over a 16-year period, the average increase in EC is 7 percent. And that -- I don't disagree with that. That's what the modeling shows.

2.0

What that 16-year average doesn't show is there are large increases in some months and for some periods that well exceed that 7 percent. The contract — if we look at the contract and talk about exceedances and the protections of the contract, it's not a long-term average that the contract envisions. It's more that real-time water quality and those provisions that provide protections to the water users and the farms and the crops within the agency.

MR. MIZELL: And if I understand the objection of your counsel, this paragraph is not intended to convey any injury that the members of North Delta would experience under the California WaterFix?

 $$\operatorname{MS.}$ NIKKEL: Objection, legal conclusion, misstates the testimony.

MR. MIZELL: Hearing Officer Doduc?

CO-HEARING OFFICER DODUC: Yes.

MR. MIZELL: I'm trying to understand the intent behind the paragraph. Ms. Nikkel objected to the question probing as to whether or not this paragraph was intended to convey injury. So I'm

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actually trying to agree with her objection as going
 2
     beyond -- that that conclusion went beyond the scope or
 3
     that question went beyond the scope, saying, well,
 4
     then, isn't it true the converse would be the case.
 5
     Either --
              CO-HEARING OFFICER DODUC: Mr. Mizell, before
 6
 7
     you go any further, as we've learned throughout this
     hearing, the term "injury" has special significance.
 8
 9
     There are -- perhaps there is a reason why Mr. Kienlen
10
     did not use that term "injury" in his testimony, nor
11
     did he use it in responding to your question. But you
12
     used that term "injury" in asking him questions, to
13
     which
14
     Ms. Nikkel then objected because of the legal
15
     significance of that term as applicable to our hearing.
16
              MR. MIZELL: Mm-hmm.
17
              CO-HEARING OFFICER DODUC: So is it your
18
     intent to ask him -- when you use the word "injury," do
19
     you intend to use it in the legal term that is
2.0
     applicable to our hearing?
21
              MR. MIZELL: I can rephrase it to avoid the
22
     word "injury." How about that?
23
              CO-HEARING OFFICER DODUC: Thank you.
                                                      Again,
24
     it's you lawyers and your sensitivities.
25
              MR. MIZELL: So Mr. Kienlen would it be
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correct to say that Paragraph 8 does not intend to make any conclusions on the protectiveness of the 1981 North Delta contract?

2.0

MS. NIKKEL: Objection, vague and ambiguous as to "protectiveness of the North Delta contract" and also outside the scope of the testimony, which is, again, focused on an analysis of modeling and the results of the modeling.

CO-HEARING OFFICER DODUC: Therefore, his answer is no?

MS. NIKKEL: I'm not going to answer for my witness. I'm just making an objection the record.

CO-HEARING OFFICER DODUC: Mr. Kienlen, what is your intention? Actually, you answered that question already. And it was focused on showing -- I don't want to answer for Mr. Kienlen either, but it's actually right there.

He is pointing out the difference between -well, there's a monthly average and then there's the
increase that is much better -- much more than a
monthly average, and that's what he's focusing on.

MR. MIZELL: Right. So we asked the question for Paragraph 7, which spoke about a different metric. In Paragraph 7, he was speaking about 5 percent in violations of the 1981 contract.

1 CO-HEARING OFFICER DODUC: And he clarified 2 that. 3 MR. MIZELL: Right, that he was not talking 4 about the contract as a whole. 5 In Paragraph 8, he's simply talking about a change in water quality at Three Mile Slough. 6 CO-HEARING OFFICER DODUC: Yes. MR. MIZELL: There's no reference to the 8 9 contract at all. 10 So my question would be very similar to that 11 of 7 but not answered in the same way. It's a 12 different statement he's making in Paragraph 8. 13 So the question would be can he confirm, like 14 in Paragraph 7, that he cannot confirm the 15 protectiveness of the 1981 contract based upon the 16 numbers represented in Paragraph 8. 17 MS. NIKKEL: I would renew my objections to 18 that question as well. 19 CO-HEARING OFFICER DODUC: Let's go back, 2.0 Mr. Kienlen, to your answer with respect to Paragraph 21 7. You said that you're -- when you used that 22 terminology "violation," that the intent was to -- the 23 focus was on the -- you acknowledged that you were 24 focused on the water quality aspect of the contract as 25 depicted in the modeling results.

Would that same phrase apply to Paragraph 8, 1 2 that you are describing or you're focusing on a water 3 quality component of the contract as reflected in the 4 modeling results? 5 WITNESS KIENLEN: I don't think this paragraph 6 speaks to the contract at all. It's simply a statement 7 that we looked at the modeling. There's been testimony 8 that says the average increase in salinity at this 9 location is 7 percent. 10 This is an observation that, yeah, the 11 average -- yes. In fact, the average is 7 percent, but 12 there's a lot -- there's a lot of times when the actual 13 increase in salinity, based on the model, is quite a 14 bit higher, greater than the 7 percent average. 15 MR. MIZELL: Okay. So Paragraph 8 is entirely silent as to the 1981 contract? 16 17 WITNESS KIENLEN: Yeah, I don't speak to the 18 contract at all, no, in that paragraph. 19 MR. MIZELL: Mm-hmm. So if we can scroll to 2.0 Page 3, Lines 9 through 11. Here, you summarize 21 NDWA-502, Tables 3 through 5. Do those tables include 22 all of the compliance points included in the 1981 23 contract? 24 WITNESS KIENLEN: No, they are -- they are 25 referring only to Sacramento River at Three Mile

Slough. 2 MR. MIZELL: Did you investigate or look at 3 modeling results for the non-reported locations? No, we did not. 4 WITNESS PARVATHINATHAN: 5 MR. MIZELL: Thank you. 6 So, Mr. Kienlen, would you agree with the 7 testimony of Dr. Nader-Tehrani that absolute 8 differences computed at a single point in time between 9 two scenarios are an inappropriate use of the model --10 of the DSM-2 model? I'll be specific. 11 WITNESS KIENLEN: I am not a modeler, and 12 although I am familiar with DSM-2 and what it's 13 supposed to do, that is not my expertise. I would say 14 that, in general, models are -- they're for comparative 15 purposes. I think I'll stop there. 16 MR. MIZELL: Thank you. I'm going to move on 17 to -- and at the break, Dr. Shankar and I had a 18 conversation. I wasn't going to try and attempt his 19 last name. So -- no disrespect; I just have an 2.0 American palate for languages. 21 CO-HEARING OFFICER DODUC: Actually, we noted 22 that he's being kind to us because "Shankar" is not the 23 entirety of his first name either. 24 MR. MIZELL: Can we bring up NDWA-501, please. And if we can scroll to Page 2, please. 25

1	In reviewing your testimony, it does not
2	appear that you highlight contract compliance as one of
3	your roles at MBK as Mr. Kienlen does; is that correct?
4	WITNESS PARVATHINATHAN: Correct.
5	MR. MIZELL: So if we could focus you on
6	Lines 23 through 26 of Page 2.
7	So, Dr. Shankar, when you use the term "1981
8	contract violations," is it intended to mean a modeled
9	exceedance of the 1981 contract water quality criteria
10	at Three Mile Slough?
11	WITNESS PARVATHINATHAN: That's correct.
12	MR. MIZELL: And it's not intended to be a
13	conclusion based upon the entirety of the 1981
14	contract?
15	WITNESS PARVATHINATHAN: That's correct.
16	MR. MIZELL: Thank you. If we could go to
17	Page 3, Line 17.
18	Dr. Shankar, on Line 17 you reference the
19	Emmaton standard. But isn't it true that the Emmaton
20	standard is unnecessary for compliance with the 1981
21	contract?
22	MS. NIKKEL: Objection, misstates the
23	testimony. I don't see any reference to the Emmaton
24	standard. But I may just be missing it.
25	MR. MIZELL: Line 17 mentions EC

concentrations of the Sacramento River at Emmaton. 2 MS. NIKKEL: Right. My objection is that the 3 testimony does not refer to a standard but refers to a 4 location on the Sacramento River. 5 MR. MIZELL: Okay. I will rephrase. Isn't it true that your reference to the water 6 7 quality at Emmaton on the Sacramento River is 8 unnecessary in light of the 1981 contract standard at 9 Three Mile Slough? 10 MS. NIKKEL: Objection, vague and ambiguous as 11 to "unnecessary." Unnecessary to what? I didn't 12 follow. CO-HEARING OFFICER DODUC: Mr. Mizell. 13 14 MR. MIZELL: Here we have in Paragraph 8, a 15 comparison being made between Emmaton and Three Mile 16 Slough. Three Mile Slough is where the contract 17 compliance location is. I'm trying to understand 18 Dr. Shankar's use of Emmaton as a surrogate in this 19 paragraph. 2.0 I'm simply trying to inquire as to why he felt 21 the need to include Emmaton in testimony when 22 discussing a Three Mile Slough compliance location. 23 CO-HEARING OFFICER DODUC: Then that's the 24 question Dr. Shankar should answer. 25 WITNESS PARVATHINATHAN: The Sacramento River

at Emmaton analysis is not relevant to the Three Mile Slough contract. The reason I'm showing that is just to show the effect of the project on the Delta, the particular location, Emmaton.

2.0

MR. MIZELL: And let's see if I can get this right from our last go-round. It would be very similar to what I was attempting to get at with Mr. Kienlen.

So it is not your intent to equate an increase in water quality at Emmaton with contract compliance or protection of the North Delta Water Agency members?

MS. NIKKEL: I'm going to make an objection on the basis of relevance. I'm not sure I understand the relevance of the intent of these witnesses.

These witnesses have been called by North

Delta Water Agency, which is a protestant in this

proceeding. And these witnesses have been called as

experts to offer their expert opinion.

It's relevant to understand what the basis and the meaning of those opinions is but not what the intent is of the experts who have been called by a protestant.

CO-HEARING OFFICER DODUC: Mr. Mizell.

MR. MIZELL: The relevance is that North Delta Water Agency holds a contract with the Department, and it states quite clearly that the North Delta Water

Agency would defend the water quality standards in that contract as protective.

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The intent of the witnesses in presenting to you changes in water quality at locations other than that contract goes to the very heart of -- as to whether or not the contract is being upheld, and it is the basis upon which North Delta Water Agency is or is not a proper -- asserting a proper injury in this hearing.

CO-HEARING OFFICER DODUC: Be as that may, that is beyond the scope of the rebuttal testimony. The intent or what you -- what inference you may make from their rebuttal testimony is outside of the scope of their rebuttal testimony.

MR. MIZELL: I was not attempting to make an inference. I was attempting for them to preclude an inference being made. It's different -- I'm trying to get them to essentially answer a question in a way that says I can't ask any further questions about compliance for that paragraph.

If -- let's see if I can sort this out.

Does Paragraph 8 have any bearing in your opinion on your previous statements in your testimony about 1981 contract violations?

WITNESS PARVATHINATHAN: No.

1	MR. MIZELL: Thank you. So, Dr. Shankar, as a
2	modeler, do you agree with the testimony of
3	Dr. Nader-Tehrani that absolute differences computed at
4	a single point in time between two scenarios are an
5	inappropriate use of the modeling results?
6	WITNESS PARVATHINATHAN: Can I see the
7	testimony? Because I have to read it in context.
8	MR. MIZELL: Certainly.
9	We can go to NDWA-502, Table 3, please.
10	WITNESS PARVATHINATHAN: I'm sorry. I was
11	looking for the testimony by Dr. Nader-Tehrani that
12	talks about how not to focus on absolute changes in
13	monthly values.
14	MR. MIZELL: Yes, well, that is we could go
15	to any number of his statements, but I'll assert to you
16	that that's his testimony.
17	WITNESS PARVATHINATHAN: Sure.
18	MR. MIZELL: Certainly just answer the
19	question under that assumption.
20	WITNESS PARVATHINATHAN: I was looking for the
21	context, whether it was made as a standalone statement
22	or are there any preceding lines that leads to that
23	statement. But I think I can answer to your question.
24	MR. MIZELL: Okay.
25	WITNESS PARVATHINATHAN: So long-term averages

are statistics. And there are many statistics to modeling data. You could use your statistics to prove a point and the point that was made by Dr. Tehrani on using long-term average has a specific reason. He talks about how the operations changed between months and how he cannot focus on particular months, and I understand it.

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At the same time, it is important to look at some monthly changes to see the why they are so extremely different.

So for example, if you look at Table -- if you can go to Page No. 3, Table 1. And as I stated in my oral testimony, if you go to row number -- or the year 1989 in September, and it says the salinity increases by

77 percent. And that is a -- that's an extremely large increase in the EC.

And I'm not saying the EC in the real world would increase by 77 percent in September of 2065. I'm just saying that that number needs much more detailed investigation to understand why there's such an increase. Is that due to a project, or is it something else?

And it's important that, as scientists, we need to investigate and understand what is causing the

And this is just some information; this is increase. 2 just another statistic that helps up dive deeper into 3 understanding more of what the project operation is. 4 Is it something in the CalSim operations model that is 5 being propagated into the DSM-2 model? 6 So these are all indicators that help us 7 investigate more and then gain more information and 8 help in making the right decisions. And that's the 9 point of presenting the statistics, not to say that 10 this is going to happen in reality. 11 CO-HEARING OFFICER DODUC: So you agree? 12 WITNESS PARVATHINATHAN: I agree that there is 13 need to focus on average statistics but also need to focus on other numbers that reveal certain aspects of 14 15 the modeling. We cannot just choose one statistics to 16 say it is superior to other statistics. It is very 17 subjective. 18 MR. MIZELL: Well, thank you very much. 19 thank you for bearing with me so late in the afternoon. 2.0 That's all my cross. 21 CO-HEARING OFFICER DODUC: Thank you, 22 Mr. Mizell. 23 Any redirect, Ms. Nikkel? 24 MS. NIKKEL: I have two brief questions 25 regarding the 1981 contract.

REDIRECT EXAMINATION BY MS. NIKKEL 1 2 MS. NIKKEL: And I'll ask this question of 3 each of the witnesses. 4 Have you been retained by North Delta Water 5 Agency to offer any opinions in this proceeding regarding the intent of the agency with respect to the 6 7 1981 contract? Would you like me to repeat the 8 question? 9 WITNESS KIENLEN: Yeah, I think so. 10 MS. NIKKEL: Have you been retained by North 11 Delta Water Agency to offer any opinions in -- and I'll 12 be more specific -- the rebuttal -- Part 2 Rebuttal 13 phase of this proceeding regarding the intent of the 14 agency with respect to the 1981 contract? WITNESS KIENLEN: 15 No. MS. NIKKEL: Dr. Shankar? 16 17 WITNESS PARVATHINATHAN: Sorry, I wasn't 18 paying attention. 19 MS. NIKKEL: Thought you were done? 2.0 WITNESS PARVATHINATHAN: Yes. 21 MS. NIKKEL: I'll repeat the question. 22 you been retained by North Delta Water Agency to offer 23 any opinions in Part 2 Rebuttal of this proceeding 24 regarding the intent of the agency with respect to the 1981 contract? 25

1	WITNESS PARVATHINATHAN: No.
2	MS. NIKKEL: So by "violations of the 1981
3	contract" used in your testimony, you mean an
4	exceedance of water quality criteria specified in the
5	1981 contract, correct?
6	WITNESS PARVATHINATHAN: Yes.
7	WITNESS KIENLEN: Yes, that's correct.
8	MS. NIKKEL: Thank you. I have nothing
9	further.
10	CO-HEARING OFFICER DODUC: Recross?
11	MR. MIZELL: No, I think we've covered it.
12	CO-HEARING OFFICER DODUC: All right. Thank
13	you. Does that conclude North Delta's?
14	MS. NIKKEL: Thank you, it does conclude North
15	Delta's Part 2 rebuttal testimony.
16	And at this time, I'd like to move exhibits
17	NDWA-500, NDWA-501, NDWA-502, and NDWA-503 into the
18	record.
19	CO-HEARING OFFICER DODUC: Any objections?
20	(No response)
21	CO-HEARING OFFICER DODUC: Not hearing any,
22	those are now moved into the record.
23	(North Delta Water Agency Exhibits 500
24	through 503 admitted into evidence)
25	MS. NIKKEL: Thank you.

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All right. Before we adjourn, just quickly, I'll remind everyone the order that we went through previously today after our lunch break is for, first of all, Dr. Shilling and Stokely, I estimated that, including presentation of direct testimony as well as cross, roughly two and a half hours. And that will be followed by Mr. Cannon and Shutes, then followed by Mr. Burke, followed by Dr. Michael, Dr. Denton, and then the panel of Morgan Wells and, I believe, it's Brodsky representing Save the California Delta Alliance.

After that would be Mr. Stroshane and Nakagawa of CSPA and County of San Joaquin and LAND -- I think that's the group -- followed by the PCFFA and LAND group of Oppenheimer, Ms. Des Jardins, and Mr. Stokely. That's about as far as we went through in terms of time estimates today.

And then we also had a note that Dr. Paulsen will appear on Friday, August 24th, on behalf of Groups 18, 19, and 20.

So we have some time estimates, but I'm not providing any guarantee as to who will appear when.

You now have the order that I'm expecting parties to

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present their oral testimony, and we will proceed in
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     that order starting tomorrow morning.
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               And with that, we are adjourned until 9:30.
               (Whereupon, the proceedings concluded
 4
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                at 4:20 p.m.)
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1	STATE OF CALIFORNIA)
2) ss. COUNTY OF MARIN)
3	I, DEBORAH FUQUA, a Certified Shorthand
4	Reporter of the State of California, do hereby certify
5	that the foregoing proceedings (Pages 140 through 234)
6	were reported by me, a disinterested person, and
7	thereafter transcribed under my direction into
8	typewriting and which typewriting is a true and correct
9	transcription of said proceedings.
10	I further certify that I am not of counsel or
11	attorney for either or any of the parties in the
12	foregoing proceeding and caption named, nor in any way
13	interested in the outcome of the cause named in said
1 4	caption.
15	Dated the 1st day of Septebmer, 2018.
16	
17	Deborah Fugua
18	DEBORAH FUQUA
19	CSR NO. 12948
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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;
13	That the above and foregoing is a full, true, and
14	correct transcription of said shorthand notes, and a
15	full, true and correct transcript of all proceedings
16	had and testimony taken;
17	That I am not a party to the action or related to
18	a party or counsel;
19	That I have no financial or other interest in the
20	outcome of the action.
21	
22	Dated: September 1, 2018
23	\wedge
24	Canida bend
2.5	Candace L. Yount, CSR No. 2737