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BEFORE THE
CALIFORNIA STATE WATER RESOURCES CONTROL BOARD

CALIFORNIA WATERFIX WATER)
RIGHT CHANGE PETITION)
HEARING)

JOE SERNA, JR. BUILDING
CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
BYRON SHER AUDITORIUM
1001 I STREET
SECOND FLOOR
SACRAMENTO CALIFORNIA

PART 1B

Wednesday, October 26, 2016

9:00 A.M.

VOLUME 23

Pages 1 - 237

Reported By: Deborah Fuqua, CSR No. 1248

Computerized Transcription by ProCAT

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 and Co-Hearing Officer:
6 Dorene D'Adamo, Board Member
7 Staff Present
8 Diane Riddle, Environmental Program Manager
Dana Heinrich, Senior Staff Attorney
9 Samantha Olson, Senior Staff Attorney
Kyle Ochenduzsko, Senior Water Resources Control Engr.
10
Jean McCue
11 Jason Baker
12
13 For California Department of Water Resources
14 James (Tripp) Mizell, Senior Attorney
15 Duane Morris, LLP
By: Thomas Martin Berliner, Attorney at Law
16 Jolie-Anne Ansley, Attorney at Law
17
U.S. Department of the Interior, Bureau Reclamation,
18 and Fish and Wildlife Service
Amy Aufdemberge, Assistant Regional Solicitor
19
20 State Water Contractors
21
Stefanie Morris
22 Adam Kear
Becky Sheehan
23
24
(Continued)
25

1 APPEARANCES (continued)

2 Central Delta Water Agency, South Delta Water Agency,
3 Lafayette Ranch, Heritage Lands Inc., Mark Bachetti
4 Farms and Rudy Mussi Investments L.P.

5 John Herrick

6 Tehama-Colusa Canal Authority and water service
7 contractors in its service area

8 Meredith Nikkel

9 Cities of Folsom and Roseville, San Juan Water
10 District, Yuba County Water Agency, and Sacramento
11 Suburban Water District

12 Ryan Bezerra

13 Placer County Water Agency

14 Daniel Kelly

15 Sacramento County Water Agency

16 Aaron Ferguson

17 City of Sacramento

18 Wesley A. Milliband

19

20 San Luis and Delta-Mendota Water Authority

21 Rebecca Akroyd

22

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ANDREW FECKO, KEITH DURKIN, SHAUNA LORANCE

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1 Tuesday, October 25, 2016 9:00 a.m.

2 PROCEEDINGS

3 ---000---

4 CO-HEARING OFFICER DODUC: All right. Good
5 morning, everyone.

6 Today is Wednesday, October 26th. And welcome
7 back to the water rights hearing for the WaterFix
8 change petition.

9 I am Tam Doduc. With me here today to my
10 right are Board Chair Felicia Marcus and Board Member
11 DeeDee D'Adamo. To my left are Dana Heinrich, Diane
12 Riddle, and Kyle Ochenduszk. We are also assisted by
13 other staff here today.

14 Our usual announcements before we begin. I
15 expect everyone to be taking copious notes in case
16 they're called on for a pop quiz later on this week.
17 Take a minute right now and locate the exit closest to
18 you. In the event of an alarm, we will evacuate this
19 room. Please take the stairs down to the first floor
20 exit and meet up in the park across the street. If
21 you're not able to use the stairs, please flag one of
22 the staff, and we will direct you to a protective area.

23 Second announcement is that this is being
24 webcasted and recorded. So always please provide your
25 comments into a microphone. Make sure it's turned on

1 first. And please begin by providing your name and
2 stating your affiliation.

3 We have a court reporter here today, and the
4 transcript will be made available on our website after
5 the completion of Part 1B. If you would like it
6 sooner, please make arrangements with her directly.

7 Third and most important, because I just heard
8 a ding going off, please take a moment and turn all
9 noise-making devices to silent, vibrate, off, whatever,
10 so that it does not emit any noise whatsoever. Even if
11 you think all that is done, please take a moment and
12 check.

13 All right. With that, I have received a
14 request to discuss scheduling, and the request came
15 from Mr. Aladjem. Before Mr. Aladjem begins, though,
16 let me just say that -- we appreciate it; we all do.
17 The challenge is going to be in this part. Given the
18 number of parties, given the number of witnesses, and
19 I'm still struggling to find, you know, that perfect
20 middle ground to wade through in order to provide some
21 accommodation for scheduling conflict but also
22 recognizing that by doing so not just that party but
23 all the parties who are behind that group in the
24 ordering will be affected as well as all the parties
25 who are preparing to conduct cross-examination will be

1 impacted. So it's going to be a challenge to find that
2 balance.

3 And Chair Marcus and I will have a meeting
4 later on to sort of figure out what the best approach
5 is.

6 So for now, Mr. Aladjem, I will take your
7 request, but I'm not committing to anything at the
8 moment. And I will share the same with all other
9 parties. My, I guess, initial preference is to just
10 stick with the order because that's the simplest way
11 for us to approach, but I do appreciate that this will
12 go on for several months and scheduling will always be
13 a challenge. So just a caveat that Chair Marcus and I
14 will be discussing it further.

15 But for now you may go ahead and make your
16 request, Mr. Aladjem.

17 MR. ALADJEM: Thank you, Chair Doduc. David
18 Aladjem, Downey Brand, on behalf of the City of
19 Brentwood.

20 Chair Doduc, last week we filed a notice of
21 unavailability for our expert witness, Dr. Susan
22 Paulsen, that indicated that Dr. Paulsen would not be
23 available this Friday, October 28th. It appears --

24 CO-HEARING OFFICER DODUC: There went that
25 noise again. Someone has not turned their devices off.

1 Everyone check. I have the sharpest ears in this room.

2 All right. Mr. Aladjem?

3 MR. ALADJEM: Thank you, Chair Doduc. That
4 Notice of Availability indicated that Dr. Paulsen would
5 not be available this Friday, the 28th. It appears
6 that the City of Brentwood's presentation either would
7 be tomorrow afternoon or sometime on Friday, at least
8 my best guess.

9 Dr. Paulsen is unavailable because she has a
10 commitment to be at the Santa Ana Regional Board
11 presenting a matter there for another client. We would
12 be, on behalf of Brentwood, absolutely ready to go
13 tomorrow afternoon, or we would be ready to go on
14 Thursday, November 3rd, whatever the Chair's preference
15 is.

16 I've consulted with petitioner's counsel, and
17 they are perfectly willing to have us go on the 3rd. I
18 believe that they will have about an hour, maybe a
19 little bit more, of cross. We anticipate our direct
20 would be an hour, maybe a little bit less.

21 We would pursue whatever would be acceptable
22 for the Chair, but it would be very appreciated if the
23 Chair would allow us to go either tomorrow afternoon or
24 the following Thursday, November 3rd. We'd be happy to
25 take any questions.

1 CO-HEARING OFFICER DODUC: I don't have any.
2 I will make a note, and we'll discuss that.

3 MR. ALADJEM: And just in terms of letting our
4 expert know, should I anticipate a ruling by the Chair
5 later today?

6 CO-HEARING OFFICER DODUC: Yes.

7 MR. ALADJEM: Thank you very much.

8 CO-HEARING OFFICER DODUC: All right.

9 Anyone else? Ms. Meserve?

10 MS. MESERVE: Good morning. Osha Meserve on
11 behalf of Land and other protestants. Just very
12 briefly, we've provided our availability for the three
13 panels that are listed as 11th, 12th and 13th, I
14 believe in this order. I'm trying to shake the trees
15 to create some more availability. I'm very concerned
16 about the prospect of losing our place altogether if we
17 can't wrangle, you know, a group of experts who have
18 pretty tight schedules. So I'm going to work to try to
19 create more availability. But as of right now, the
20 availability is what I have stated in the notice.

21 And so I think as a matter of due process -- I
22 know that we need to keep things moving, and I know it
23 affects people later in line as well if I can't bring
24 my panels forward when the Board is ready. So I'm
25 trying to avoid all that.

1 I would say that for anybody who's listening
2 who is later in line from me, anyone who would like to,
3 because of their availability, go earlier, that would
4 be very helpful. And I may be able to present one of
5 my panels earlier than I noticed it. And I will be in
6 contact with the Board immediately as soon as I have
7 that information.

8 CO-HEARING OFFICER DODUC: Thank you,
9 Ms. Meserve.

10 Mr. Berliner?

11 MR. BERLINER: Thank you. Good morning. Tom
12 Berliner on behalf of the Department of Water
13 Resources.

14 With respect to Mr. Aladjem's request to go
15 either tomorrow afternoon or next week, we would be
16 much more amenable to going next week. Moving
17 Brentwood up is a problem for us in terms of
18 preparation of cross-examination. We've been dealing
19 with the current panels in East Bay MUD, so we're ready
20 to go on those. We're not ready to go on Brentwood.

21 And as far as other requests, whether it's
22 Ms. Meserve or other parties, we're happy to, in our
23 view, understanding that it's obviously subject to the
24 Board, but we're happy to accommodate as long as we
25 know when they want to go. So we have flexibility on

1 that. We'll prepare for whomever in whichever order
2 but knowing in advance is extremely important to us.

3 MR. EMRICK: Thank you, Board. Matthew
4 Emrick, City of Antioch. I also filed a Notice of
5 Availability of Witnesses. I share the same expert as
6 Brentwood, Dr. Susan Paulsen. Dr. Paulsen has a lot of
7 conflicts. I think in my notice I said November 18th,
8 but talking to her this morning, she has also opened up
9 the possibility of November 10th and November 4th.

10 However, in talking with respect to DWR, the
11 feeling was November 4th would be too early for them,
12 but I think they felt that the 18th or the 10th would
13 work. And I'm willing to take Dr. Paulsen out of
14 order, and I only have one other witness. So I can
15 split my panel. I don't have a problem with that.
16 Thank you.

17 CO-HEARING OFFICER DODUC: Thank you for those
18 updates. Again, we will discuss that and try to do our
19 best to sort of balance between efficiency and
20 flexibility, recognizing that the number of parties,
21 number of witnesses makes this especially challenging.

22 Seeing -- Ms. Morris? Okay. Looked like she
23 was about to pounce there.

24 Let's go ahead, and we will resume with
25 Group 7. And we will be presenting direct testimony

1 for Panel No. 5, Mr. Bezerra, Mr. Kelly.

2 MR. KELLY: Yeah, if I can very briefly.

3 Einar Maisch was supposed to appear on this panel.

4 He's the general manager of the Placer County Water

5 Agency. Mr. Maisch is out of the country. Andrew

6 Fecko is the director of resources development for

7 Placer County Water Agency, assisted in the preparation

8 of Mr. Maisch's testimony and is familiar with it and

9 is familiar with all operations of Placer County Water

10 Agency.

11 We've let everyone know that. We had filed a

12 Notice of Availability for Mr. Maisch until next week.

13 I expect that Mr. Fecko will be able to answer any

14 questions that folks have with respect to the Placer

15 County Water Agency and Einar's testimony. If not, we

16 can bring Mr. Maisch in when he gets back to the extent

17 that anyone needs to ask questions that may be either

18 personal to him or that Mr. Fecko couldn't answer. But

19 that's why he's not appearing today.

20 CO-HEARING OFFICER DODUC: Okay. If that's

21 all, then I will go ahead and ask your witnesses to

22 please stand and raise their right hands.

23 (Panel sworn)

24 RICHARD PLECKER, MARCUS YASUTAKE, ANDREW FECKO, KEITH

25 DURKIN, SHAUNA LORANCE,

1 called as witnesses on Panel 5 for
2 Protestant Group 7, having been first
3 duly sworn, were examined and testified
4 as hereinafter set forth:

5 CO-HEARING OFFICER DODUC: You may begin.

6 MR. BEZERRA: Thank you, Ms. Doduc. We have a
7 brief opening statement.

8 So, good morning. My name is Ryan Bezerra.
9 As you know, I represent the Cities of Folsom and
10 Roseville, Sacramento Suburban Water District, San Juan
11 Water District, and Yuba County Water Agency in this
12 hearing.

13 Today, Folsom, Roseville and San Juan will
14 present their testimony concerning the potential
15 impacts of the California WaterFix project on their
16 water supplies.

17 Before turning to their specific testimony,
18 however, I'd like to generally summarize the concerns
19 of the agencies within the American River Water
20 Agencies Group. In addition to Folsom, Roseville, and
21 San Juan, this group includes the City of Sacramento,
22 Placer County Water Agency, Sacramento County Water
23 Agency, and Sacramento Suburban. These agencies
24 submitted a joint written opening statement and they
25 will individually present separate as well as joint

1 testimony.

2 Collectively our agencies provide water
3 service to over 1 million people. The American River
4 agencies' fundamental concern is that the
5 implementation and operation of the California WaterFix
6 project very well could worsen existing risks to our
7 agencies' water supplies. These risks are largely
8 driven by the operation of Folsom Reservoir.

9 As this Board knows, drought conditions and
10 related operations of the Central Valley Project and
11 the State Water Project in recent years have resulted
12 in the reservoir being brought down to extremely low
13 levels. In fact they reached their lowest level ever
14 in December of 2015.

15 Put simply, the American River agencies' water
16 supplies would be injured if California WaterFix were
17 to enable Folsom Reservoir to more often be drawn as
18 low as it was in 2015. The reservoir should not be
19 drawn that low now, and it must not be drawn that low
20 more often in the future as a result of California
21 WaterFix.

22 The resulting risks affect not just the
23 agencies that deliver directly from the reservoir but
24 also agencies downstream whose water supplies depend on
25 releases from the reservoir.

1 Each of the American River agency managers
2 will testify about how these risks in particular affect
3 his or her own agency.

4 The experts for the American River agencies
5 either have already explained or will shortly explain
6 how California WaterFix could worsen these risks. You
7 have already heard Walter Bourez and Dan Easton of MBK
8 Engineers testify about how California WaterFix would
9 enable releases from upstream reservoir storage greater
10 than those projected by the petitioner's modeling.

11 The American River agencies are members of the
12 Sacramento Valley water users group that presented
13 MBK's testimony and rely on it. The American River
14 agencies' expert, Jeff Weaver, will testify probably
15 later today that the petitioner's own modeling shows
16 that, in a water year followed by a critically dry
17 year, California WaterFix would enable Folsom Reservoir
18 storage to be drawn down dramatically going into that
19 critically dry year.

20 Mr. Weaver will also testify that in that
21 critically dry year, the petitioners' modeling does not
22 realistically depict how Folsom Reservoir and the Lower
23 American River would operate. The uncertainty in
24 petitioners' modeling of dry year operations therefore
25 compounds the uncertainty created by the fact that

1 petitioners have not proposed a plan for operating the
2 CVP and the SWP with California WaterFix in place.

3 In a moment, the witnesses for the Cities of
4 Folsom and Roseville and San Juan Water District will
5 testify concerning each of their agencies' unique water
6 supplies and how these water supplies have unique legal
7 protections.

8 Marcus Yasutake will testify for the City of
9 Folsom about the City's 1850s' era water rights and the
10 City's settlement contracts with the United States,
11 among other things. Richard Plecker will testify for
12 the City of Roseville about the City's prior water
13 right application and the terms that the State Water
14 Rights Board adopted in 1958 to protect Roseville,
15 among others, when that board approved Reclamation's
16 water right permits for Folsom Dam.

17 Shauna Lorance will testify for San Juan Water
18 District about that district's 1850's era water right
19 and its settlement contract with the United States.
20 Each of these managers will testify about how crucial
21 water supplies from Folsom Reservoir are to their
22 communities, about how each of them depend on
23 Reclamation to maintain sufficient reservoir storage in
24 Folsom Reservoir to enable diversions to their
25 agencies, and about severe water supply problems that

1 would occur if Reclamation were to not maintain that
2 level of storage.

3 Finally, each of these managers will testify
4 about why he or she believes California WaterFix
5 presents increased risks to their water supplies
6 associated with low Folsom Reservoir storage.

7 Folsom, Roseville, and San Juan, along with
8 the other agencies in the American River water agencies
9 group will respectfully request that this Board ensure
10 that implementation of California WaterFix will not
11 reduce their water supplies. Thank you.

12 CO-HEARING OFFICER DODUC: Thank you,
13 Mr. Bezerra.

14 MR. BEZERRA: And with that, we're ready to
15 proceed with direct examination of this panel.

16 CO-HEARING OFFICER DODUC: Hold on a second,
17 please.

18 MS. ANSLEY: Good morning. Jolie-Anne Ansley
19 with Duane Morris for petitioner DWR.

20 We'd like to, before Panel 5 gets started,
21 lodge an objection that the witnesses here providing
22 testimony are providing testimony beyond the scope of
23 what was noticed in their notice of intent filed by San
24 Juan Water District, City of Roseville, City of Folsom,
25 and the Placer Water Agency.

1 All of these witness who provided substantive
2 testimony -- Mr. Yasutake, Mr. Plecker, Ms. Lorance,
3 and Mr. Maisch -- provided testimony on matters that
4 were beyond the scope of their water rights contracts
5 and supplies and operations to provide further
6 testimony on the impacts of the California WaterFix.
7 None of these witnesses were also disclosed as expert
8 witnesses.

9 So we would like to lodge an objection and
10 move to strike the portions of their testimony that
11 analyze the impacts of the WaterFix on their
12 operations.

13 CO-HEARING OFFICER DODUC: Mr. Bezerra,
14 Mr. Kelly?

15 MR. KELLY: Yeah, if I can -- I'm actually
16 simply not sure I understand the objection. Mr. Fecko
17 and Mr. Maisch's testimony is what it is, and they
18 haven't testified outside of the scope of that yet. So
19 I'm not sure what the objection is with respect to the
20 Placer County Water Agency.

21 CO-HEARING OFFICER DODUC: Let's hold -- let's
22 hold the objections and responses for now unless,
23 Mr. Bezerra, you have something to add.

24 MR. BEZERRA: I think you just covered it, and
25 we're happy to come back later.

1 CO-HEARING OFFICER DODUC: Yes, I will note
2 your objections. I will allow the direct to proceed
3 and cross-examination to proceed, and we will consider
4 the objection you just voiced.

5 MS. ANSLEY: And in particular, I'd like to
6 point the Board to Ms. Lorance', Mr. Plecker's, and
7 Mr. Yasutake's testimony which clearly have sections
8 titled "Injuries" to their respective parties from the
9 California WaterFix. Thank you.

10 CO-HEARING OFFICER DODUC: Thank you. Please
11 proceed.

12 MR. BEZERRA: Thank you very much.

13 DIRECT EXAMINATION OF PANEL 5 BY MR. BEZERRA

14 If we could pull up Exhibit Folsom 3E, please.

15 MR. BEZERRA: Thank you.

16 Mr. Yasutake, could you please state your name
17 for the record.

18 WITNESS YASUTAKE: Marcus Yasutake.

19 MR. BEZERRA: Have you taken the oath in this
20 hearing?

21 WITNESS YASUTAKE: Yes, I have.

22 MR. BEZERRA: Thank you. Is Exhibit Folsom 1
23 your testimony in this hearing?

24 WITNESS YASUTAKE: Yes.

25 MR. BEZERRA: Is Exhibit 2 a correct statement

1 of your qualifications?

2 WITNESS YASUTAKE: Yes.

3 MR. BEZERRA: Are Exhibits Folsom 3 through
4 Folsom 25 referenced in your testimony?

5 WITNESS YASUTAKE: Yes.

6 MR. BEZERRA: What is your position with the
7 City of Folsom?

8 WITNESS YASUTAKE: I am the environmental and
9 water resources director.

10 MR. BEZERRA: What are your responsibilities
11 in that position?

12 WITNESS YASUTAKE: That department covers the
13 water and sewer for the entire city of Folsom including
14 water supplies and delivery.

15 MR. BEZERRA: To approximately how many people
16 does the City of Folsom provide service?

17 WITNESS YASUTAKE: About 64,000.

18 MR. BEZERRA: If we could move to Slide No. 2,
19 please. Thank you.

20 Mr. Yasutake, what is the basis for the City's
21 water supplies?

22 WITNESS YASUTAKE: The City has a settlement
23 contract for 27,000 acre-feet annually and a Central
24 Valley Project water service contract for 7,000
25 acre-feet annually. And that is a subcontract through

1 Sacramento County Water Agency, who holds the prime
2 contract with Bureau of Reclamation.

3 MR. BEZERRA: Are the City's water supplies
4 under its settlement contract subject to being reduced
5 in dry years?

6 WITNESS YASUTAKE: I do not -- there is
7 nothing that I can find that would state there are any
8 reductions in that settlement contract.

9 MR. BEZERRA: If we could move to Slide No. 3,
10 please.

11 And, Mr. Yasutake, what are the water rights
12 that the City of Folsom holds?

13 WITNESS YASUTAKE: As I mentioned before, this
14 depiction shows an 1851 filing from the City's
15 predecessor, Natoma Water Company, for -- in this time,
16 it was 32,000 acre-feet for Natoma Water Company. And
17 since this filing, the City has access or acquired
18 27,000 acre-feet annually of that 32,000 acre-feet
19 listed in this 1851 filing.

20 MR. BEZERRA: And this is the water right that
21 is reflected in the City's settlement contract,
22 correct?

23 WITNESS YASUTAKE: Yes.

24 MR. BEZERRA: If we to move to the next slide,
25 please.

1 From where does the City of Folsom physically
2 obtain its water supplies?

3 MR. YASUTAKE: From Folsom Reservoir through a
4 shared intake physically built into the dam. That
5 intake is shared with the City of Roseville, San Juan
6 Water District, the City of Folsom, and Folsom Prison.

7 MR. BEZERRA: Does the City obtain its water
8 supplies from any other physical location?

9 WITNESS YASUTAKE: No, the City does not.

10 MR. BEZERRA: Can we move to the next slide,
11 please.

12 What happens to the availability of water from
13 Folsom Reservoir to the City as the reservoir's storage
14 level declines?

15 WITNESS YASUTAKE: So this picture depicts
16 certain reservoir elevations and then some of the water
17 supply constraints that are availability for the City
18 of Folsom, City of Roseville, San Juan Water District
19 during certain reservoir elevations compared to certain
20 demands to each of the agencies. And you can see at
21 about the 330-foot elevation, that is where water
22 supply can become challenging to our agencies.

23 MR. BEZERRA: And that's 330 feet mean sea
24 level, correct?

25 WITNESS YASUTAKE: Yes.

1 MR. BEZERRA: If we could move to the next
2 slide, please.

3 Do you recognize the pictures in this slide?

4 WITNESS YASUTAKE: Yes.

5 MR. BEZERRA: Have you observed Folsom
6 Reservoir in these two statuses?

7 WITNESS YASUTAKE: Yes, I have.

8 MR. BEZERRA: What has the recent drought
9 indicated about the possibilities of low Folsom
10 Reservoir levels impacting the City's water supplies?

11 WITNESS YASUTAKE: What it has shown, that if
12 the water level, as the previous picture shows -- if it
13 gets to approximately that 330-foot mean sea level
14 elevation, there can be challenges delivering water not
15 only to the City of Folsom but to the City of
16 Roseville, San Juan Water District, and the prison
17 because we all share a common intake.

18 MR. BEZERRA: Thank you. Move to Slide 7,
19 please.

20 What sort of emergency contingency plans have
21 been discussed to serve the City if Folsom Reservoir
22 were to reach those very low levels?

23 WITNESS YASUTAKE: In the last year and a
24 half, close to two years, there have been two I guess
25 different alternatives that have been proposed to

1 deliver water to the City of Folsom during a time where
2 the elevation could get to 330 foot -- 330 feet mean
3 sea level.

4 One is what's depicted here, and this is a
5 drawing from Reclamation that shows a temporary pump
6 station in Folsom Reservoir upstream of the dam that
7 would serve the City of Roseville, the City of Folsom,
8 San Juan Water District, and the prison with
9 approximately 100 cubic feet per second of water
10 supply.

11 A second alternative -- and I believe we have
12 some slides that will show this is a --

13 MR. BEZERRA: Yes. If we --

14 WITNESS YASUTAKE: Oh, sorry.

15 MR. BEZERRA: If we could move to the next
16 slide.

17 WITNESS YASUTAKE: So the second alternative
18 is what was actually installed by Reclamation, and this
19 alternative is specifically for the City of Folsom and
20 the Folsom Prison. This does not include San Juan
21 Water District or the City of Roseville.

22 And what this picture is, are ten
23 three-cubic-feet-per-second -- so a total of 30 cubic
24 feet per second -- pumps installed in the reservoir
25 itself to deliver water to the City of Folsom and

1 Folsom Prison.

2 MR. BEZERRA: And just to confirm, when was
3 this installed?

4 WITNESS YASUTAKE: This was about September,
5 maybe late August, September of 2015.

6 MR. BEZERRA: How much water, again, could
7 those emergency pumps have provided the City of Folsom,
8 specifically?

9 WITNESS YASUTAKE: Based on the information
10 from Reclamation, 30 cubic feet per second.

11 MR. BEZERRA: And how does that amount compare
12 to the amounts of your contracts with Reclamation?

13 WITNESS YASUTAKE: It's about half.

14 MR. BEZERRA: It's about half of the total
15 supply covered by your contracts?

16 WITNESS YASUTAKE: Correct, and that's just
17 for the City.

18 MR. BEZERRA: And you would have had to share
19 that supply with the Folsom Prison, correct?

20 WITNESS YASUTAKE: That is correct. I just do
21 not know what the split would be.

22 MR. BEZERRA: Okay. And what is it about the
23 California WaterFix proposal that causes you to believe
24 it could negatively impact the City's water supplies?

25 WITNESS YASUTAKE: As some previous testimony

1 by Mr. Bourez, Mr. Easton showed, is that there are
2 concerns that, if water levels were drawn down even
3 below the 135,000 acre-feet that we saw in December of
4 2015 is that this is a major concern in delivering the
5 city's water supplies and not having access to the
6 contract entitlements.

7 MR. BEZERRA: Thank you very much.

8 We move to Mr. Plecker at this point. So if
9 we could move to Slide 9.

10 Mr. Plecker, please state your name for the
11 record.

12 WITNESS PLECKER: Richard Plecker.

13 MR. BEZERRA: And you need to turn your mic on
14 there and press the button.

15 Could you please state your name for the
16 record.

17 WITNESS PLECKER: Yes. Richard Plecker.

18 MR. BEZERRA: Have you taken the oath for this
19 hearing?

20 WITNESS PLECKER: I have.

21 MR. BEZERRA: Is Exhibit Roseville 1 your
22 testimony in this hearing?

23 WITNESS PLECKER: It is.

24 MR. BEZERRA: Is Exhibit Roseville 22 a
25 correct statement of your qualifications?

1 WITNESS PLECKER: It is.

2 MR. BEZERRA: Are Exhibits Roseville 3 through
3 Roseville 18 referenced in your testimony?

4 WITNESS PLECKER: They are.

5 MR. BEZERRA: And are you also relying on
6 certain Folsom exhibits as explained in your testimony?

7 WITNESS PLECKER: I am. I believe it's
8 Folsom 3.

9 MR. BEZERRA: Is there anything in your
10 testimony you'd like to clarify?

11 WITNESS PLECKER: I have three references to
12 figures that I had jotted down but left in my bag. So
13 I'll have to retrieve that at some point. They're just
14 annotations with respect to figure numbers.

15 MR. BEZERRA: Typographical errors?

16 WITNESS PLECKER: Yes.

17 MR. BEZERRA: We will be happy to provide an
18 edited version if the Board would like that.

19 CO-HEARING OFFICER DODUC: Please do so.

20 MR. BEZERRA: Thank you.

21 Mr. Plecker, what is your position at City of
22 Roseville?

23 WITNESS PLECKER: I'm the environmental
24 utilities director.

25 MR. BEZERRA: What are your responsibilities

1 in that position?

2 WITNESS PLECKER: I'm responsible for water
3 supply, wastewater operations, solid waste operations,
4 storm water, and recycled water.

5 MR. BEZERRA: To approximately how many people
6 does the City of Roseville provide water service?

7 WITNESS PLECKER: 130,000.

8 MR. BEZERRA: Thank you.

9 If we could move to Slide 10, please.

10 To the best of my knowledge, did the City of
11 Roseville ever apply for its own water rights in the
12 American River?

13 WITNESS PLECKER: It did.

14 MR. BEZERRA: What was the amount of that
15 application?

16 WITNESS PLECKER: As I recall, the -- in our
17 Application 12295 we filed with the State prior to
18 1958, we had asked for 120,000 acre-feet of storage
19 with a flow rate of 350 cubic feet per second.

20 MR. BEZERRA: Why does the city not have its
21 own water rights to American River water?

22 WITNESS PLECKER: As I review the records and
23 I understand it, in Decision 893 the State Water Board
24 was trying to resolve a number of competing
25 applications at that time. The Board essentially

1 found -- and I'm paraphrasing What it said, is that,
2 with respect to the city's application and others, that
3 those applications could be better served through a
4 contract with the United States.

5 MR. BEZERRA: And some of the competing
6 applications were the United States applications for
7 Folsom Dam and Reservoir, correct?

8 WITNESS PLECKER: That's correct, amongst
9 others.

10 MR. BEZERRA: How the State Water Rights Board
11 in Decision 893 attempt to protect the City of
12 Roseville when it denied the City's water right
13 application?

14 WITNESS PLECKER: Well, two ways. One is
15 the -- narratively the State Board wrote that our
16 particular region has a natural dependency upon the
17 American River, noted that. And then secondarily, in
18 terms of the order issued, basically orders that said
19 that exports beyond Placer, Sacramento, and San Joaquin
20 Counties shall be limited except for on a temporary
21 basis, until the needs of those counties are met.

22 MR. BEZERRA: Thank you.

23 If we could move to 11, please.

24 What are the City of Roseville's water
25 supplies?

1 WITNESS PLECKER: Well, we have a number. We
2 have surface water supplies, groundwater supplies, and
3 recycled water supplies.

4 MR. BEZERRA: How do you obtain your surface
5 water supplies?

6 WITNESS PLECKER: All of our surface water
7 currently we receive through the combined intake, as
8 Mr. Yasutake mentioned, at Folsom Dam.

9 MR. BEZERRA: Under what contracts do you
10 obtain those supplies?

11 WITNESS PLECKER: We have three surface water
12 contracts at present. We have a
13 32,000-acre-foot-per-year contract with Reclamation.
14 We have a 30,000-acre-foot-per-year contract with
15 Placer County Water Agency for Middle Fork project
16 water. And we have a 4,000, in total, acre-foot
17 contract with San Juan Water District.

18 MR. BEZERRA: How do those surface water
19 supplies compare to your other water supplies in terms
20 of the amount of the city's total supply that they
21 provide?

22 WITNESS PLECKER: By far, the surface water
23 supplies are the majority of our total water supply.

24 MR. BEZERRA: And I think you may have said
25 this already, but the city's sole physical location

1 where it obtains those water supplies is the M&I intake
2 at Folsom Dam, correct?

3 WITNESS PLECKER: Yes, that's correct.

4 MR. BEZERRA: Thank you.

5 Could we please move to Slide 12.

6 You described this a little bit already, but
7 could you please explain how physically the City of
8 Roseville obtains its water supply, surface water
9 supply?

10 WITNESS PLECKER: Sure. This is a little bit
11 further detail on what Mr. Yasutake explained at the
12 joint intake. In the upper sort of center portion of
13 the slide, you see the joint intake. You see that not
14 shortly thereafter -- not shortly thereafter downstream
15 of it, the flow splits both to the east and to the
16 west.

17 To the east it serves the City of Folsom and
18 Folsom Prison through the Natoma pipeline, and then it
19 splits to the west going through a pump station with
20 various bypass stations to serve San Juan Water
21 District and the City of Roseville with what I believe
22 is the North Fork pipeline.

23 MR. BEZERRA: How do declines in Folsom
24 Reservoir storage affect the ability of the city to
25 physically obtain its supplies for these facilities?

1 WITNESS PLECKER: Everything that Mr. Yasutake
2 just mentioned. I might further elaborate that, at
3 certain reservoir elevations, the pumping plant shown
4 here to the left starts to not pump as efficiently as
5 it could have. So I would add that additional emphasis
6 that, if there's a physical point at which the intake
7 daylight, but there's some reservoir level above which
8 vortexing can start to occur. And long before that,
9 pumping efficiency is greatly reduced, which inhibits
10 our capacity to deliver at peak demands.

11 MR. BEZERRA: Can we move to Slide 13, please.
12 Did you observe Folsom Reservoir in February
13 2014?

14 WITNESS PLECKER: I did.

15 MR. BEZERRA: Does this slide accurately
16 depict the state of the reservoir at that time?

17 WITNESS PLECKER: It does.

18 MR. BEZERRA: To the best of your knowledge,
19 what emergency measures were in 2014 and '15?

20 WITNESS PLECKER: As Mr. Yasutake said, we
21 were in collaboration with Reclamation in developing
22 the hundred cfs pump station that was floating out in
23 Folsom with one additional variable. Mr. Yasutake
24 pointed out that the 30 cfs pump station to serve
25 Folsom was ultimately built and constructed.

1 What was in envisioned for San Juan and
2 Roseville was one of two options, either the
3 construction of emergency pumping facilities at the
4 Folsom Dam tail race or service off the existing
5 emergency pump off Pen Stock No. 1.

6 MR. BEZERRA: And how does the supply that
7 those facilities could have provided to the City
8 compare with your contracts?

9 WITNESS PLECKER: I think for reference it
10 would be somewhere on the order of about half.

11 MR. BEZERRA: Thank you.

12 Could we move to Slide 14, please.

13 What water supplies does the city have in
14 addition to its surface water supplies?

15 WITNESS PLECKER: As I mentioned, both
16 groundwater and recycled water, which are used in
17 predominantly in the western portion of the city, in
18 this picture, shown in pink.

19 MR. BEZERRA: Why are those supplies
20 predominantly used in the western portion of the city?

21 WITNESS PLECKER: For two different reasons.
22 On the groundwater side, this is the only portion of
23 the city where it's underlain by an aquifer system
24 where we can withdraw groundwater.

25 What happens is, to the east of that pink area

1 in this diagram the Murton Formation daylights, and we
2 encounter hard rock in that portion of the city.

3 However, on the western part of the Murton
4 Formation, it's a rich aquifer system. So groundwater
5 is by nature limited to that area from a production
6 sense. It's also difficult to then pump groundwater
7 back uphill. We've got a topographical or -- yeah,
8 it's a topographical elevation change of about 500 feet
9 from the west to the east of the city. That makes it
10 very difficult to move groundwater to the east.

11 So that's groundwater. So on recycled water,
12 similarly our wastewater treatment plants in Roseville
13 -- there's two of them. They're both located down
14 gradient of the city in the western half of the city.
15 By extension, the cost and expense of extending
16 recycled water systems by very nature limits the extent
17 to which we can supply recycled water across the city.

18 MR. BEZERRA: What sort of groundwater storage
19 program does the city have?

20 WITNESS PLECKER: The city, approximately ten
21 years ago, engaged in an aquifer storage and recovery
22 facility system. We went through the process of
23 building, demonstrating, and eventually permitting an
24 ASR program for the city. Our program now includes six
25 ASR wells.

1 At some point in the future, we will be
2 expanding that by another ten ASR wells. The theme or
3 the premise there is that as surplus surface waters
4 become available from time to time, we would treat that
5 water supply and inject underground for later use, not
6 upsetting the sustainable balance of the underlying
7 groundwater basin.

8 MR. BEZERRA: How dependant is the city's
9 groundwater storage program on its surface water
10 supplies.

11 WITNESS PLECKER: It's absolutely dependant.
12 It's -- the surface water supplies are our source of
13 supply.

14 MR. BEZERRA: And how dependant is the city's
15 recycled water program on its surface water supplies?

16 WITNESS PLECKER: Because we do use ground
17 water in summer, it's almost not as dependent, 100
18 percent dependent. But it's fair to say it's entirely
19 dependant, for discussion purposes, on surface water
20 supplies.

21 MR. BEZERRA: Could we move to Slide 50,
22 please.

23 What is it about the California WaterFix
24 proposal that causes you to believe it could negatively
25 impact the city's water supplies?

1 WITNESS PLECKER: Well, as have been pointed
2 out, our expert has previously testified and our
3 experts will testify in the future that there's
4 certainly enough uncertainty about this project to
5 cause some concerns. And as a manager, I would look at
6 it from the standpoint of how do you communicate this
7 to the public and making it in terms of a meaningful
8 dialog.

9 So I think the fact that there is a
10 disagreement as to how the project will perform, there
11 certainly is no understanding of who benefits from the
12 project and, most importantly, who's going to pay for
13 it represents a great deal of uncertainty for my
14 agency.

15 MR. BEZERRA: Thank you.

16 If we could move to the next slide.

17 And, Ms. Lorance. Ms. Lorance, could you
18 please state your name for the record.

19 WITNESS LORANCE: Shauna Lorance.

20 MR. BEZERRA: And have you taken the oath in
21 this hearing?

22 WITNESS LORANCE: Yes, I have.

23 MR. BEZERRA: Is Exhibit SJWD-1 your testimony
24 in this hearing?

25 WITNESS LORANCE: Yes, it is.

1 MR. BEZERRA: Is SJDW-2 a correct statement of
2 your qualifications?

3 WITNESS LORANCE: Yes, it is.

4 MR. BEZERRA: Are Exhibits SJWD-3 through
5 SJWD-14 referenced in your testimony?

6 WITNESS LORANCE: Yes.

7 MR. BEZERRA: Are you relying on Folsom and
8 Roseville exhibits as explained in your testimony?

9 WITNESS LORANCE: Yes.

10 MR. BEZERRA: Mr. Durkin, could you please
11 state your name for the record.

12 WITNESS DURKIN: Keith Durkin.

13 MR. BEZERRA: Have you taken the oath in this
14 hearing?

15 WITNESS DURKIN: Yes, I have.

16 MR. BEZERRA: Is Exhibit SJWD-15 your
17 testimony in this hearing?

18 WITNESS DURKIN: Yes, it is.

19 MR. BEZERRA: Is Exhibit SJWD-16 a correct
20 statement of your qualifications?

21 WITNESS DURKIN: Yes, it is.

22 MR. BEZERRA: Ms. Lorance, what is your
23 position with San Juan Water District?

24 WITNESS LORANCE: General manager.

25 MR. BEZERRA: What are your responsibilities

1 in that position?

2 WITNESS LORANCE: My responsibilities is for
3 water supply -- is providing water supply on a
4 wholesale basis to Citrus Heights, Fair Oaks,
5 Orangevale, City of Folsom north of the American River,
6 and our San Juan retail service area. It's also to
7 oversee the delivery of water to our entire retail
8 area.

9 MR. BEZERRA: If you combine San Juan Water
10 District's wholesale and resale services, to
11 approximately how many people does San Juan provide a
12 water supply?

13 WITNESS LORANCE: Approximately 160,000.

14 MR. BEZERRA: Thank you.

15 Could we move to Slide 17.

16 Ms. Lorance, what is the basis for San Juan's
17 water supplies?

18 WITNESS LORANCE: San Juan Water District has
19 an 1853, obviously pre-1914, water right for 33,000
20 acre-feet, which we've maintained the water right and
21 have a settlement with the Bureau to deliver it to us
22 without shortage on an annual basis. Do you want me to
23 go through the other ones, too?

24 MR. BEZERRA: Yes, please.

25 WITNESS LORANCE: And then we have a

1 24,200-acre-foot service contract under the Central
2 Valley Project with the Bureau of Reclamation. And we
3 also have a 25,000-acre-feet contract for delivery from
4 PCWA, of which 4,000 of that has been reallocated to
5 the City of Folsom, as you heard from Mr. Plecker -- I
6 mean to Roseville, sorry.

7 MR. BEZERRA: Thank you.

8 Could we move to Slide 18, please.

9 I believe you stated this, but what is the
10 amount of San Juan Water District's settlement contract
11 with the United States?

12 WITNESS LORANCE: It's for 33,000 acre-feet
13 delivered to San Juan without shortage.

14 MR. BEZERRA: When you say "shortage," you
15 mean dry year shortage?

16 WITNESS LORANCE: Correct. There is no -- I
17 can't think of the right word. There is no term that
18 would allow it to be reduced.

19 MR. BEZERRA: Thank you.

20 Could we move to the next slide, please,
21 Slide 19.

22 I think you explained this previously, but the
23 District also has a CVP long-term water service
24 contract, correct?

25 WITNESS LORANCE: Correct.

1 MR. BEZERRA: And a contract with Placer
2 County Water Agency for service water deliveries?

3 WITNESS LORANCE: Correct, as I explained
4 previously.

5 MR. BEZERRA: How physically does the District
6 obtain its water supplies?

7 WITNESS LORANCE: This has been described by
8 the other two witnesses previously. We get it from the
9 M&I intake. It's our sole supply location of which to
10 get water from, the Folsom Reservoir. And we are 100
11 percent reliant on surface water at San Juan Water
12 District. So I won't repeat all of their discussions,
13 but effectively it's the same intake.

14 MR. BEZERRA: Thank you.

15 If we could move to Slide 20, please.

16 Did you observe Folsom Reservoir in 2015?

17 WITNESS LORANCE: Yes, I did.

18 MR. BEZERRA: Do these picture accurately
19 depict?

20 WITNESS LORANCE: Yes.

21 MR. BEZERRA: How were you involved with the
22 management of Folsom Reservoir during 2015?

23 WITNESS LORANCE: I was working with the
24 Bureau weekly, if not daily, in order to figure out the
25 best way to keep the reservoir at a level that would

1 allow us to continue to get water to the intake.

2 MR. BEZERRA: What water supply risks to San
3 Juan District did management of Folsom Reservoir create
4 in 2015?

5 WITNESS LORANCE: It created a significant
6 risk of the lake dropping below with level at which we
7 could still obtain adequate water supply for health and
8 safety for our customers on surface water. Luckily, we
9 got a storm that year, and we ended up being okay in
10 that year. But there was a very serious concern
11 related to our ability to meet health and safety water
12 demands for our customers.

13 MR. BEZERRA: And you heard Mr. Plecker
14 explain how Reclamation discussed providing emergency
15 supplies in 2015 to Roseville and San Juan, correct?

16 WITNESS LORANCE: Correct.

17 MR. BEZERRA: And to the best of your
18 knowledge, was that an accurate description?

19 WITNESS LORANCE: Yes.

20 MR. BEZERRA: How would those emergency
21 supplies have compared to San Juan's contracts?

22 WITNESS LORANCE: With the amount that they
23 were intending and you divided between San Juan and
24 Folsom [sic] on our side, it would have been
25 significantly below our water right, let alone below

1 all of our other contracts also.

2 MR. BEZERRA: And you said that the supply
3 would have been divided between San Juan and Folsom,
4 but on that side of the river it would have been San
5 Juan and Roseville, correct?

6 WITNESS LORANCE: Sorry. I keep saying Folsom
7 instead of Roseville. It's because he's sitting right
8 next to me. San Juan and Roseville, correct.

9 MR. BEZERRA: Thank you very much.

10 And that completes our direct examination.

11 CO-HEARING OFFICER DODUC: Thank you,
12 Mr. Bezerra.

13 Mr. Kelly?

14 MR. KELLY: Yes. Thank you.

15 DIRECT EXAMINATION OF PANEL 5 BY MR. KELLY

16 MR. KELLY: Mr. Long, if we could pull up
17 PCWA-071, please.

18 CO-HEARING OFFICE MARCUS: Could I go back to
19 the Folsom 3? I'm sorry. But you had a new version of
20 Folsom 3? It looks like you just added page numbers.
21 Was that --

22 MR. BEZERRA: The two edits from the original
23 Folsom 3 to this, which is Folsom 3E, yes, we added
24 page numbers. And then on Slide 3, we corrected a
25 typographical error. So we've been operating from 3E.

1 CO-HEARING OFFICER MARCUS: Okay. Thank you.

2 CO-HEARING OFFICER DODUC: Mr. Kelly?

3 MR. KELLY: Yes, thank you. PCWA-071, please.

4 Good morning, Mr. Fecko.

5 WITNESS FECKO: Good morning.

6 MR. KELLY: Can you please state your name and
7 spell your last name for the record.

8 WITNESS FECKO: Andrew Fecko, last name is F
9 as in "Frank," E-C-K-O.

10 MR. KELLY: Is your microphone on?

11 WITNESS FECKO: It is.

12 MR. KELLY: And can you get a little bit
13 closer so your voice projects? There you go.
14 Thank you.

15 Have you taken the oath in this proceeding?

16 WITNESS FECKO: I have.

17 MR. KELLY: Is PCWA-021 a correct copy of your
18 testimony?

19 WITNESS FECKO: It is.

20 MR. KELLY: And is PCWA-020 a copy of the
21 written testimony of Einar Maisch, PCWA's general
22 manager?

23 WITNESS FECKO: It is.

24 MR. KELLY: Are you familiar with Mr. Maisch's
25 testimony?

1 WITNESS FECKO: I am.

2 MR. KELLY: Did you assist in its preparation?

3 WITNESS FECKO: I did.

4 MR. KELLY: Do you concur with the contents of
5 his testimony?

6 WITNESS FECKO: I do.

7 MR. KELLY: If asked, will you be able, to the
8 best of your ability, to answer cross-examination
9 questions with respect to Mr. Maisch's testimony?

10 WITNESS FECKO: To the best of my ability,
11 yes.

12 MR. KELLY: Did you assemble or direct the
13 assemblage of the materials referenced in PCWA-020 and
14 PCWA-021?

15 WITNESS FECKO: Yes, I assisted and directed.

16 MR. KELLY: So those exhibits are PCWA-022
17 through 071?

18 WITNESS FECKO: Correct.

19 MR. KELLY: And to the best of your knowledge
20 are those true and correct copies of the documents
21 listed in PCWA's identification index?

22 WITNESS FECKO: They are.

23 MR. KELLY: Are some or all those maintained
24 by PCWA?

25 WITNESS FECKO: They are.

1 MR. KELLY: Are you familiar with the work
2 that MBK performed on behalf of the Sacramento Valley
3 water users for this proceeding?

4 WITNESS FECKO: I am.

5 MR. KELLY: Are you familiar with the reports
6 and testimony generated by MBK as part of that work?

7 WITNESS FECKO: I am.

8 MR. KELLY: And you are the director of
9 resources development at the Placer County Water
10 Agency, correct?

11 WITNESS FECKO: Correct.

12 MR. KELLY: And generally, what do your
13 responsibilities include?

14 WITNESS FECKO: So my department that I
15 oversee is responsible for energy sales, for North Fork
16 American River Project, water operations of our two
17 major reservoirs, maintenance of our water rights as
18 well as legislative and regulatory affairs, both in the
19 State and in Washington, D.C.

20 MR. KELLY: And so for the agency, then, do
21 you oversee and direct the operations of the Middle
22 Fork Project?

23 WITNESS FECKO: I do.

24 MR. KELLY: In your role as director of
25 resource development at PCWA, is the work undertaken by

1 MBK, the reports and testimony prepared by MBK the type
2 of information that you would normally rely upon to
3 determine whether PCWA's water rights or water supplies
4 are injured or otherwise impacted?

5 WITNESS FECKO: Yes. That's the type of work
6 we rely on.

7 MR. KELLY: Would the same be true for the
8 work done by HDR and other consultants with respect to
9 the American River generally?

10 WITNESS FECKO: Yes, We regularly rely on
11 consultants to perform expert type of work on our
12 behalf.

13 MR. KELLY: Okay. With that, I'd just please
14 ask you to summarize your testimony.

15 WITNESS FECKO: Certainly.

16 MR. KELLY: Your testimony and the testimony
17 of Mr. Maisch.

18 WITNESS FECKO: Certainly. So if we could
19 turn to the next page of this presentation. Thank you.

20 So this is generally a summary of PCWA's water
21 rights for the Middle Fork American River Project, at
22 least the consumptive water rights.

23 So what we've put on this slide here is water
24 rights Permits 13856 and 13858 are the consumptive
25 water rights issued in 1963 by this Board. They allow

1 for the diversion, storage, and re-diversion of water
2 from the North Fork American and Middle Fork American,
3 and particularly the Rubicon River and other select
4 tributaries. The purposes of the use are listed there:
5 irrigation, domestic, recreational, municipal and
6 industrial use in western Placer County.

7 MR. KELLY: Mr. Fecko, if I could just
8 interrupt you briefly, the -- everything that's -- all
9 of the testimony is being taken stenographically by the
10 court reporter, and she has to keep up with you. So
11 I'd ask you to just keep that in mind and perhaps slow
12 down the pace of your testimony.

13 WITNESS FECKO: Thank you, Mr. Kelly.

14 So let me repeat that last part.

15 The uses for our water rights include
16 irrigation, domestic, recreational, municipal and
17 industrial uses in western Placer County and more
18 recently northern Sacramento County.

19 The two existing points of re-diversion for
20 those consumptive uses are at the American River pump
21 station at Auburn California and at Folsom Dam.

22 If we could turn the page to the map.

23 So for purposes of orientation, the City of
24 Sacramento on this map of the American River watershed
25 is at the lower part of the map. You'll see it

1 highlighted there with the red dot. You'll note Folsom
2 Reservoir and Folsom Dam are in the lower third of that
3 picture.

4 The highlighted green area is the American
5 River watershed, both -- all three, the North, the
6 Middle and the South American. And at the top of the
7 map there is Lake Tahoe, and you'll see the watershed
8 boundary is just west of Lake Tahoe.

9 So let me start the story of how our -- PCWA's
10 water rights work. At the two large storage reservoirs
11 on that map called French Meadows Reservoir and Hell
12 Hole Reservoir, these two reservoirs have a combined
13 storage capacity of approximately 342 1/2-thousand
14 acre-feet.

15 And those reservoirs operate as you would
16 assume other reservoirs in the Sierra Nevada operate,
17 which is to say that they store water during periods of
18 runoff, generally starting around November and
19 continuing through the following June. We put water in
20 storage in those reservoirs. We then release water
21 through a system of five hydroelectric powerhouses and
22 five regulating reservoirs for two uses: one, to make
23 hydroelectric energy; and, two, to supply water to our
24 retail and our wholesale customers. And I'll speak
25 more about that in a moment.

1 These reservoirs are generally operated to
2 fill in the -- by about the July 1 time frame, slightly
3 earlier in drier years. And then through the course of
4 the summer, we evacuate those reservoirs to a carryover
5 storage of about 150,000 acre-feet which the agency,
6 through long operation, in fact, over 50 years of
7 operation, has determined to be a safe carryover
8 storage for those reservoirs that will allow us to
9 provide a reliable water supply to the citizens of
10 western Placer and northern Sacramento Counties even if
11 the following year or following several years have
12 drought conditions.

13 So orienting again on the map.

14 Those releases that we make during the summer
15 and fall period make their way down the series of
16 powerhouses and down through the river system to the
17 point at Auburn, which you'll see highlighted there
18 with the top arrow, where we can re-divert up to 35,500
19 acre-feet.

20 That point is an interesting point on this
21 map. That is the site of the planned Auburn Dam which
22 was planned by the Bureau of Reclamation. And actually
23 the story of the Auburn Dam is the story of the Placer
24 County Water Agency as well.

25 Placer County Water Agency, while we were in

1 the planning stages of the Middle Fork Project,
2 actually had a larger project with a larger dam at
3 about the point on the map labeled Ralston Afterbay.
4 It was an additional 100,000 acre-foot dam.

5 And with those three dams -- French Meadows,
6 Hell Hole and American Bar Dam at that point -- we
7 would have been able to fulfill all the needs of our
8 retail and wholesale customers, which at the time were
9 determined to be about 237,000 acre-feet a year.

10 When the Auburn Dam was being constructed and
11 we had -- the Bureau and Placer County Water Agency had
12 essentially cross-protested each other's water right
13 filings, a settlement was reached between the Bureau and
14 PCWA. And the settlement essentially allowed the
15 Bureau to construct the Auburn Dam at the location
16 where they wanted to construct it and at the size they
17 wished to construct it. But what it did mean was that,
18 for PCWA, we had to move or reduce -- generally reduce
19 the size of the American Bar Dam from 100,000 acre-feet
20 down to just a 2,000 acre-foot regulating reservoir.

21 At the same time, the Bureau and the agency
22 came to terms on how water was to be supplied to Placer
23 County, and instead of the 237,000 acre-feet that the
24 agency, PCWA, intended to supply, we split the
25 difference. The agency was to supply 120,000 acre-feet

1 from its Middle Fork Project, the now smaller Middle
2 Fork Project, And the Bureau of Reclamation would
3 essentially supply the other half of the need, 117,000
4 to Placer County.

5 Well, of course, as we know, the Auburn Dam
6 was not built, and the agency has been -- essentially
7 was left with a smaller project, which we now manage to
8 fulfill our needs in Placer County in the most
9 efficient way we know how.

10 Finally, the other point of re-diversion is at
11 Folsom Dam, which is the lower arrow on your map. So
12 for purposes of illustration, after water flows down
13 the Middle Fork American then the North Fork American,
14 passes by our pump station at Auburn where again we can
15 divert up to 35,500 acre-feet of our 120,000 acre-foot
16 agreed-upon maximum with the Bureau, the remainder of
17 the water that we release on a daily basis ends up in
18 Folsom Reservoir.

19 Important point about that, as you've heard
20 from the rest of my panelists, they rely on a municipal
21 intake at Folsom Reservoir that's built into the dam.
22 That's also the point of our re-diversion for our water
23 rights, and that's how we supply the City of Roseville,
24 San Juan Water District, and in wetter years, the
25 Sacramento Suburban Water District.

1 It's subject -- that same intake you've
2 already heard the limitations of that intake, we're
3 subject to the same limitations but from the standpoint
4 of this is now PCWA water rights water, of which these
5 agencies have a right to access at that location. It
6 is in fact PCWA water rights' water that, for about
7 a -- for exactly a 30-day period has a residence time
8 in Folsom Lake.

9 So what does that mean? In any given month in
10 the summertime, for instance, of this year, there was
11 30- to 35,000 acre-feet of PCWA water rights water in
12 Folsom Reservoir available for diversion by my
13 wholesale partners And, in fact, by PCWA at that
14 location should we choose to re-divert it.

15 That's an important distinction of our
16 interest in Folsom Reservoir is that we use it to
17 supply our wholesale partners.

18 So if we could turn the page.

19 Speaking of wholesale partners --

20 MR. KELLY: Mr. Fecko, if I can interrupt you
21 just to make sure I understand and perhaps the Board
22 understands, when you were talking about the Middle
23 Fork Project, you talked about managing that project to
24 have sufficient water for everyone in western Placer
25 County and Northern Sacramento County, do you mean that

1 PCWA has enough water to supply everyone with all the
2 water they need or simply that PCWA can meet its
3 contract obligations as a result of the management of
4 the Middle Fork Project?

5 WITNESS FECKO: That's an important
6 distinction. So we have -- you've heard about our
7 water supply contracts with these -- with wholesale
8 entities. We have enough water to supply those
9 contractual obligations in wet as well as dry years, in
10 all years. And that's how we base our carryover
11 storage at our reservoirs.

12 So what the Board is looking at now is another
13 map. And this map is a little more zoomed in on Folsom
14 Reservoir, and it has several highlighted areas.

15 The area highlighted in orange is our original
16 place of use for our water rights for the Middle Fork
17 Project and generally can be thought of as being able
18 to be served from that Auburn point of diversion that
19 we discussed, as well as a portion of that could be
20 served from the Folsom Reservoir point of diversion.

21 As a result of the Water Form agreement signed
22 in 2000, it was recognized that a groundwater
23 replenishment program would be valuable to the region.
24 And so in about 2000, this Board approved an expansion
25 of our place of use to include that portion encircled

1 in green in northern Sacramento County.

2 And in that portion, PCWA is able to use its
3 Middle Fork Project water rights in years when Folsom
4 unimpaired inflow is above 1.6 million acre-feet. So
5 you could think of that as sort of above-average years.
6 We are able to serve surface water to that place of
7 use, which was predominantly groundwater reliant in the
8 past. And as a result of that expansion in place of
9 use, since the late 1990s, early 2000s, there's been
10 approximately 250,000 acre-feet of groundwater banked
11 in that area, recharging and stabilizing that
12 groundwater basin.

13 You'll also see on this map, back to that
14 orange, that a portion of the San Juan Water District
15 and the City of Roseville as well as PCWA's own service
16 territories, noted as PCWA's Zone 1 and Zone 5, are
17 reliant in part on the agency's Middle Fork American
18 River water rights. And we serve those areas today
19 using the both the Auburn point of diversion but
20 actually more so from the Folsom Reservoir point of
21 diversion.

22 The majority of our contract, wholesale
23 contract water is diverted -- re-diverted at the Folsom
24 point of diversion.

25 I will skip the next slide. Go to the last

1 one.

2 So finally, Mr. Maisch and I have reviewed the
3 testimony of Walter Bourez of MBK Engineers, and we're
4 relying on that testimony and the bounds of the
5 analysis that he did in that testimony to have an
6 opinion about what California WaterFix might be -- how
7 it might impact Folsom Reservoir.

8 And in our view, it appears that Folsom
9 Reservoir could be lower in the future as a result of
10 California WaterFix -- of the California WaterFix
11 project if there were no permit terms and conditions
12 placed on that project which would protect upstream
13 storage.

14 MR. KELLY: And, Mr. Fecko, Placer County
15 Water Agency and Folsom Reservoir are upstream of the
16 new proposed intakes as part of the WaterFix project,
17 correct?

18 WITNESS FECKO: Correct.

19 MR. KELLY: So is your understanding of two
20 possible impacts to Placer County Water Agency based on
21 an understanding that the impacts of the project may
22 extend upstream of the physical diversion locations in
23 the Sacramento River?

24 WITNESS FECKO: That's right. In our review
25 of Mr. Bourez's work, it appears to us that the impacts

1 of the project reach up into the tributaries and in
2 fact reach up into federal- and state-owned, in this
3 particular case, Folsom Reservoir facilities.

4 MR. KELLY: Thank you. And with that, I think
5 we'll just turn the panel over for cross-examination.

6 CO-HEARING OFFICER DODUC: Thank you,
7 Mr. Kelly, Mr. Bezerra. If you would like to join your
8 witnesses.

9 Does the Department wish to cross-exam? The
10 Department is coming up. Does anyone else wish or plan
11 to cross-exam this panel? Just one. Okay.

12 CROSS-EXAMINATION BY MS. ANSLEY

13 MS. ANSLEY: Jolie-Anne Ansley with the law
14 firm of Duane Morris here with Mr. Mizell on behalf of
15 the Department of Water Resources.

16 I'd like to start with Mr. Fecko, please. Let
17 me just open up to the pages.

18 Primarily my questions will be about
19 Mr. Maisch's testimony.

20 But let me just confirm, you're not testifying
21 here today as an expert, are you, Mr. Fecko?

22 WITNESS FECKO: I'm not.

23 MS. ANSLEY: And Mr. Maisch was not designated
24 as an expert, was he?

25 WITNESS FECKO: He was not designated as an

1 expert, no.

2 MS. ANSLEY: And you were designated in the
3 notice of intent to give testimony on American River
4 water supplies, management and flows; is that correct?

5 WITNESS FECKO: Yes.

6 MR. KELLY: I will object. The notice of
7 intent to appear and the testimony speaks for itself.
8 So to the extent that misstates the notice of intent to
9 appear or the testimony, I would object.

10 CO-HEARING OFFICER DODUC: So noted.

11 Continue with your questioning for now.

12 MS. ANSLEY: And if you also just would
13 confirm that Mr. Maisch was noticed to provide
14 testimony on Placer County Water Agency policy
15 statement and background?

16 WITNESS FECKO: I don't know.

17 MS. ANSLEY: Are you here today to provide an
18 opinion on the impacts of the Cal WaterFix on Placer
19 County Water Agency operations?

20 WITNESS FECKO: We have an opinion on the
21 California WaterFix and how it might impact our
22 operations at Folsom.

23 MS. ANSLEY: Okay. Is that same true of
24 Mr. Maisch, you're speaking for yourself and
25 Mr. Maisch?

1 WITNESS FECKO: Correct.

2 MS. ANSLEY: So your testimony does provide an
3 opinion on potential injuries?

4 WITNESS FECKO: My testimony and Mr. Maisch's
5 testimony, I believe, reflect our understanding of the
6 technical expert we have hired to provide us a view of
7 what the California WaterFix impacts may be.

8 MS. ANSLEY: And does your opinion -- and I'm
9 also speaking to Mr. Maisch's opinion in his written
10 testimony, rely on the technical analysis performed by
11 MBK?

12 WITNESS FECKO: It does.

13 MS. ANSLEY: Did Placer County Water Agency,
14 independently of MBK, perform any analysis?

15 WITNESS FECKO: We did not.

16 MS. ANSLEY: So your conclusions rest solely
17 on Mr. Bourez's testimony and the work of MBK?

18 WITNESS FECKO: That's what's referenced in
19 our testimony, Yes.

20 MR. KELLY: And I would object. Mr. Fecko
21 also referenced work by HDR and other consults that do
22 work in the American River Basin, so it misstates his
23 testimony.

24 CO-HEARING OFFICER DODUC: So noted.

25 Ms. Morris?

1 MS. MORRIS: I have an objection. I'd like to
2 move to strike that testimony about HDR, if you look
3 at -- Mr. Maisch? Maisch? One more time for me.

4 WITNESS FECKO: Maisch.

5 MS. MORRIS: Maisch, thank you. My apologies.
6 Good thing he's not here.

7 If you look at his testimony, which is marked
8 as PCWA-020, on Page 22, under the title "Injury to
9 PCWA's Water Rights and CVP Supply," it simply states
10 on Line 17, "Based upon the work of and testimony by
11 MBK Engineers on behalf of the Sacramento Valley Water
12 Users, it is my understanding," and it goes on. It
13 says nothing about the work by Mr. Weaver for HDR or
14 any other expert consultants.

15 CO-HEARING OFFICER DODUC: Mr. Kelly?

16 MR. KELLY: Yes, I can respond to that.
17 Placer County Water Agency, in its previous submittals,
18 indicated it was part of the Sacramento Valley water
19 users and the American River water agencies. Those
20 agencies have submitted expert testimony in this
21 proceeding that include testimony by HDR.

22 And while the first part of that paragraph
23 references work done by MBK Engineers, the rest of that
24 paragraph talks about the testimony and evidence
25 presented by the other American River water agency

1 representatives. And so I think that everything that
2 Mr. Fecko said is completely consistent with and
3 included in the actual written testimony that was
4 provided to the Board.

5 CO-HEARING OFFICER DODUC: Thank you,
6 Mr. Kelly.

7 Anything to add, Ms. Morris? We will take all
8 of that under advisement for now.

9 MS. ANSLEY: Can you confirm -- you testified
10 earlier -- did you assist Mr. Maisch in the preparation
11 of his testimony?

12 WITNESS FECKO: I did.

13 MS. ANSLEY: You compiled the exhibits that
14 are referenced in his testimony you said?

15 WITNESS FECKO: Some of them, yes, and
16 assisted in the preparation of testimony and the
17 presentation you saw today.

18 MS. ANSLEY: Were there any particular
19 sections of the testimony that you helped prepare?

20 WITNESS FECKO: I reviewed all of the
21 testimony.

22 MS. ANSLEY: Did anyone else help you or
23 Mr. Maisch prepare your testimony?

24 WITNESS FECKO: All our testimony was prepared
25 in-house at PCWA with Mr. Maisch and myself and with

1 the assistance of Mr. Kelly.

2 MS. ANSLEY: On Page 21 of Mr. Maisch's
3 testimony -- would you like to bring that up?

4 MR. KELLY: Yeah, can we -- if we're going to
5 talk about testimony, perhaps, put it on the screen?

6 MS. ANSLEY: Sure.

7 MR. KELLY: Thank you.

8 MS. ANSLEY: Mr. Maisch states at Lines 24
9 through 26, that:

10 "Every modeling scenario
11 presented shows Folsom Reservoir
12 at dead pool one in every ten
13 years."

14 Do you see that?

15 WITNESS FECKO: I see that.

16 MS. ANSLEY: Do you see where Mr. Maisch
17 provides a cite or basis for that statement?

18 WITNESS FECKO: The citation that it appears
19 to be provided there is "Every modeling scenario
20 presented." And the reference there is to I believe
21 the WaterFix documentation itself.

22 MS. ANSLEY: And based on your understanding
23 of Mr. Maisch's testimony, does this include -- in
24 terms of "every modeling scenario," does this include
25 the no-action alternative as well?

1 WITNESS FECKO: I don't know.

2 MS. ANSLEY: I think that's all my questions
3 for Mr. Fecko.

4 CO-HEARING OFFICER DODUC: Before you move
5 forward, though, Mr. Fecko was unable to answer your
6 last question.

7 Does that mean you wish for Mr. Maisch to
8 appear for cross-examination?

9 MS. ANSLEY: No. I think that this is an
10 unsubstantiated statement and --

11 CO-HEARING OFFICER DODUC: I wasn't asking
12 for --

13 MS. ANSLEY: No, I don't think we need
14 Mr. Maisch to show up for the one sentence.

15 CO-HEARING OFFICER DODUC: All right. Thank
16 you.

17 MS. ANSLEY: Mr. -- Yasutake, is that
18 pronouncing your name correctly?

19 WITNESS YASUTAKE: Yes, it is.

20 MS. ANSLEY: Can you confirm again that you
21 drafted the testimony listed as Exhibit Folsom 1?

22 WITNESS YASUTAKE: Yes.

23 MS. ANSLEY: The notice of intent submitted by
24 Folsom is designating you to provide testimony on water
25 rights and contracts, supplies and operations of the

1 City of Folsom?

2 WITNESS YASUTAKE: Yes.

3 MS. ANSLEY: Did anyone assist you in the
4 preparation of your testimony?

5 WITNESS YASUTAKE: Yes, outside legal counsel.

6 MS. ANSLEY: In what way did they assist you?

7 WITNESS YASUTAKE: Well, they developed
8 essentially a template for myself to fill in certain
9 aspects that are specific to Folsom water and
10 operations.

11 MS. ANSLEY: So it was more of an outline that
12 you filled in?

13 WITNESS YASUTAKE: Outline? No. A template.

14 MS. ANSLEY: Were you designated to provide
15 testimony on the impacts of the California WaterFix?

16 MR. BEZERRA: Objection, vague and ambiguous.
17 The whole hearing's about the impacts of the California
18 WaterFix.

19 CO-HEARING OFFICER DODUC: Ms. Ansley, please
20 provide some specifics.

21 MS. ANSLEY: Sure. If you would look at
22 starting at Paragraph 34 of your testimony, please.

23 And can you confirm that Paragraphs 34 through
24 42 of your testimony fall under the heading that you've
25 provided here of "Risks of injury to the city's water

1 supply by the proposed California WaterFix project"?

2 WITNESS YASUTAKE: Did you say through 42?

3 MS. ANSLEY: Yes, I believe that's the last
4 paragraph in your testimony.

5 WITNESS YASUTAKE: Yes, that is correct.

6 MS. ANSLEY: And again, my question was were
7 you listed on the notice of intent as a witness who is
8 going to provide testimony on injuries of the
9 California WaterFix?

10 MR. BEZERRA: Objection, relevance. The whole
11 hearing is about the impacts of the California
12 WaterFix. The -- as I understand it, the notice -- I
13 went back and read the Board's rulings. The only
14 effect of the designation of an expert is whether or
15 not someone needed to provide a statement of
16 qualifications, which Mr. Yasutake and the entire panel
17 have provided.

18 CO-HEARING OFFICER DODUC: I assume this goes
19 to your --

20 MS. ANSLEY: Right. I would like to --

21 CO-HEARING OFFICER DODUC: Your line of
22 questioning goes to support for your objection that you
23 voiced earlier?

24 MS. ANSLEY: That's correct.

25 CO-HEARING OFFICER DODUC: Which is still

1 under consideration.

2 Ms. Morris?

3 MS. MORRIS: Thank you. Ms. Morris for the
4 State Water Contractors.

5 I think that the notice of intent is not just
6 to identify who's an expert but also the point of it is
7 the scope of the testimony. And the scope of the
8 testimony that was provided in the notice of intent did
9 not include injury and an opinion about injury. And
10 each of these individual's notice of intents and their
11 scope. And the whole point of that information is to
12 avoid surprise testimony.

13 CO-HEARING OFFICER DODUC: Thank you.

14 Mr. Kelly, keeping in mind that all of this is
15 being taken under consideration at the moment.

16 MR. KELLY: Yes, and so I'll be very brief.

17 The purpose of a protest is to allege injury,
18 period. And so any testimony provided has to be
19 towards that goal. And this entire panel, to the
20 extent they are explaining the potential injury to
21 them, is in fulfillment of the protest.

22 MR. BEZERRA: And if I could add just a little
23 more. One point is this whole discussion seems to be
24 headed as to the relevance of whether someone is an
25 expert or not an expert. We're operating under

1 Government Code 11.513, and Subdivision (c) of that
2 states that any relevant evidence shall be admitted if
3 it is the sort of evidence on which reasonable persons
4 are accustomed to rely in the conduct of serious
5 affairs.

6 The opinions provided have been the basis,
7 among other things, of the Board taking action on
8 temporary emergency change orders in the last couple of
9 years. They are certainly the basis of how these
10 managers operate their agencies and seek to minimize
11 risks to their agencies.

12 So for purposes of this hearing, it's a rather
13 artificial distinction, expert versus non-expert.

14 CO-HEARING OFFICER DODUC: Thank you all for
15 that input.

16 Ms. Ansley, do you have additional
17 cross-examination?

18 MS. ANSLEY: I do have additional
19 cross-examination. We're just going to renew our
20 objection, obviously, to -- and I'm happy to provide
21 the paragraphs of the testimony for Ms. Lorange as well
22 as Mr. Plecker as well so they can be efficient.

23 CO-HEARING OFFICER DODUC: Thank you. We'll
24 just note it for now.

25 MS. ANSLEY: Thank you.

1 Looking at Paragraph 34 of your testimony,
2 Mr. Yasutake, can we call that up? Sorry. It's up --
3 I apologize. If you scroll down a little. Thank you.

4 You reference Folsom -- Exhibit Folsom 25.
5 Could we call that up?

6 (Exhibit Folsom 25 identified for the record)

7 MS. ANSLEY: And I believe you want to go to
8 the last page, Figure 8 at the bottom.

9 Mr. Yasutake, this is the figure you
10 referenced in your testimony; is that correct?

11 WITNESS YASUTAKE: Yes.

12 MS. ANSLEY: And I'm sorry, maybe we can
13 scroll up a little bit. Thank you.

14 And this Exhibit Folsom 25 comes from the
15 recirculated DEIR?

16 WITNESS YASUTAKE: Yes.

17 MS. ANSLEY: And you cite this exhibit stating
18 that this modeling shows that Folsom Reservoir will be
19 drained to approximately 100,000 acre-feet at the end
20 of September during 10 percent of all years; is that
21 correct?

22 WITNESS YASUTAKE: Yes.

23 MS. ANSLEY: Looking at this graph, does that
24 also include the same conclusion for the no action
25 alternative which is here marked in blue?

1 WITNESS YASUTAKE: That is what it looks like.

2 MS. ANSLEY: Turning to Paragraph 36 of your
3 testimony which references Figure 14 of DWR 514. Can
4 we go to DWR 514, please.

5 (DWR 154 identified for the record)

6 MS. ANSLEY: I believe Figure 14 is the second
7 to last page, so maybe 17, PDF 17.

8 Is this the other figure that you reference in
9 Paragraph 36, I believe, of your testimony?

10 WITNESS YASUTAKE: Yes.

11 MS. ANSLEY: And in Paragraph 36, you state
12 that this figure shows that in 5 percent of years,
13 simulated end of September Folsom reservoir storage
14 will be drawn down to 90,000 acre-feet or less; is that
15 correct?

16 WITNESS YASUTAKE: Yes, it is.

17 MS. ANSLEY: Looking at this figure, does this
18 also show that the same result occurs with the no
19 action alternative which is here in a solid black line?

20 MR. BEZERRA: I'm going to object that this
21 misstates evidence. DWR's expert modeler Armin Munevar
22 testified that the modeling was not reliable for
23 purposes of showing what the projects would do in very
24 dry conditions.

25 CO-HEARING OFFICER DODUC: Ms. Ansley?

1 MS. ANSLEY: Is this an exhibit that you were
2 relying on, Mr. Yasutake, for your testimony?

3 WITNESS YASUTAKE: Yes.

4 MS. ANSLEY: Okay.

5 CO-HEARING OFFICER DODUC: Overruled.

6 Please answer.

7 MS. ANSLEY: Does this show that the same
8 result is your conclusion for all modeling scenarios?

9 WITNESS YASUTAKE: That's what this figure
10 looks to show.

11 MS. ANSLEY: Looking at your testimony,
12 Paragraphs 34 through 42, are these the only two
13 figures or pieces of evidence that you specifically
14 reference?

15 MR. BEZERRA: Could we see the paragraph she's
16 referencing? Thank you.

17 MS. ANSLEY: Sure.

18 CO-HEARING OFFICER DODUC: What was the
19 exhibit again, Ms. Ansley?

20 MS. ANSLEY: In his testimony, he references
21 the two exhibits we just looked at, Folsom 25 and
22 DWR-514, Figure 14. My read of his testimony from
23 Paragraphs 34 and 35, 36, 37, 38, primarily reference
24 these two exhibits, and I just want to make sure
25 there's not another DWR exhibit that's listed here.

1 So I just want him to confirm that he's
2 relying on these two exhibits.

3 WITNESS YASUTAKE: That is correct. I do not
4 see any other references to other exhibits.

5 MS. ANSLEY: Thank you. I think that's all my
6 questions for Mr. Yasutake.

7 WITNESS YASUTAKE: Thank you.

8 MS. ANSLEY: Mr. Plecker.

9 WITNESS PLECKER: Yes.

10 MS. ANSLEY: Good morning. Can you confirm
11 again that you prepared the testimony marked as Exhibit
12 Roseville 1?

13 WITNESS PLECKER: I did.

14 MS. ANSLEY: Did anyone assist you in the
15 drafting of this testimony?

16 WITNESS PLECKER: Yes, my staff and legal
17 counsel.

18 MS. ANSLEY: Does your staff include
19 Mr. McKinney and Mr. Mulligan?

20 WITNESS PLECKER: It would be Ms. McKinney and
21 Mr. Mulligan.

22 MS. ANSLEY: Oh, excuse me. I apologize.

23 And in what way did they assist in the
24 preparation of your testimony?

25 WITNESS PLECKER: Assembling various charts

1 and figures and assembling the general package as well
2 as an overall review of the text.

3 MS. ANSLEY: And they are not here today on
4 this panel?

5 WITNESS PLECKER: They are not.

6 MS. ANSLEY: Were there any particular
7 sections that they drafted?

8 WITNESS PLECKER: It's been some time ago. I
9 don't exactly recall who did what.

10 MS. ANSLEY: Can we look at Paragraph 52 of
11 your testimony, please.

12 MS. McCUE: Do you have an exhibit number?

13 MS. ANSLEY: Oh, I apologize. His testimony
14 is Roseville 1.

15 MS. McCUE: Thank you.

16 MS. ANSLEY: Excuse me for a minute.

17 Mr. Plecker, Paragraph 52 falls under a
18 section of your testimony starting on Paragraph 37 that
19 you titled "Risks of Injury to Roseville's Water Supply
20 by Proposed Cal WaterFix Project," correct?

21 WITNESS PLECKER: Correct.

22 MS. ANSLEY: Okay. Looking at Paragraph 52.
23 In this paragraph, you are relying on describing
24 Exhibit Roseville 17; is that correct?

25 WITNESS PLECKER: That's what it says, yes.

1 MS. ANSLEY: Can we look at Roseville 17,
2 please. Second page. Figure 8, please.

3 Is this the same figure that we just spoke
4 about with Mr. Yasutake which was listed as Folsom 25?

5 WITNESS PLECKER: It appears to be, yes.

6 MS. ANSLEY: And in this paragraph, you also
7 state that this modeling shows that Folsom Reservoir
8 would be drained to approximately 100,000 acre-feet at
9 the end of September during 10 percent of all years; is
10 that correct?

11 WITNESS PLECKER: That's correct.

12 MS. ANSLEY: Looking at Figure 8 here, I'm
13 going to pose the same question. Does this show the
14 same result or the same conclusion you make for the no
15 action alternative which is here in dark blue?

16 MR. BEZERRA: And again just to repeat the
17 objection, it misstates evidence in that DWR has
18 testified in the hearing after submission of the
19 exhibits that the modeling is not accurate for very dry
20 conditions.

21 CO-HEARING OFFICER DODUC: That was the same
22 objections you made before. It is overruled.

23 Please answer.

24 WITNESS PLECKER: I can't recall the question.
25 Could you restate it, please.

1 MS. ANSLEY: Sure. Looking at Figure 8, which
2 is on the screen, does this -- what you rely on in
3 Paragraph 52 and others, does this show the same result
4 for the no action alternative which is in dark blue?

5 WITNESS PLECKER: Essentially at this scale.

6 MS. ANSLEY: And you relied on this figure in
7 your testimony?

8 WITNESS PLECKER: I did.

9 MS. ANSLEY: Similarly, in Paragraph 54 of
10 your testimony, you also rely on the previously
11 discussed DWR 514, Figure 14; is that correct?

12 WITNESS PLECKER: Correct.

13 MS. ANSLEY: Can we look at that figure one
14 more time.

15 MS. McCUE: Is that DWR 514?

16 MS. ANSLEY: Yes, it is. Thank you.

17 MS. McCUE: Thank you.

18 MS. ANSLEY: Mr. Plecker, do you recognize
19 this exhibit?

20 WITNESS PLECKER: I do.

21 MS. ANSLEY: Is this the exhibit that you rely
22 on in your testimony?

23 WITNESS PLECKER: Yes.

24 MS. ANSLEY: Is the exhibit in Paragraph 54
25 that you rely on when you state that the modeling shows

1 that in 5 percent of years simulated end of September
2 for Folsom Reservoir storage will be drawn down to
3 90,000 acre-feet or less?

4 WITNESS PLECKER: I believe it is.

5 MS. ANSLEY: Quickly again just looking at
6 this figure, do you also agree that the same result is
7 shown for the no action alternative?

8 WITNESS PLECKER: Essentially, yes.

9 MS. ANSLEY: Okay. Are Folsom -- sorry. I
10 get confused between Folsom and Roseville.

11 Is Roseville 17 and DWR 514, Figure 14, are
12 they the Heineken evidentiary basis for your
13 conclusions regarding impacts of the California
14 WaterFix?

15 WITNESS PLECKER: I think in part.

16 MR. BEZERRA: Objection, misstates testimony.

17 There's quite a bit of additional testimony
18 that's the basis for his conclusions.

19 CO-HEARING OFFICER DODUC: Ms. Ansley?

20 MS. ANSLEY: Sure. So looking at Paragraph 52
21 of your testimony again, do you have it there?

22 Great. Thank you.

23 Is Exhibit Roseville 17 the basis on which you
24 formulated your conclusions in Paragraph 52?

25 WITNESS PLECKER: I believe it's part of it.

1 Yes.

2 MS. ANSLEY: Do you cite any other evidence in
3 Paragraph 52?

4 WITNESS PLECKER: I do not.

5 MS. ANSLEY: Looking at Paragraph 54.

6 I'm sorry. Can we move up to 53. The same
7 question for Paragraph 53. Do you see where it cites
8 Exhibit Roseville 17?

9 WITNESS PLECKER: I haven't found it. Oh,
10 there is it. Okay.

11 CO-HEARING OFFICER DODUC: I'm sorry. I
12 didn't hear that last response from you.

13 WITNESS PLECKER: I said yes, I did.

14 CO-HEARING OFFICER DODUC: Okay.

15 WITNESS PLECKER: It took me a while. Sorry.

16 MS. ANSLEY: That's fine.

17 And Exhibit Roseville 17 is Figure 8 in the
18 RDR hydrologic modeling; is that correct?

19 WITNESS PLECKER: I believe so, yes.

20 MS. ANSLEY: And that's -- Exhibit Roseville
21 17 is the basis for your conclusions in Paragraph 53?

22 WITNESS PLECKER: In part, yes.

23 MS. ANSLEY: And then finally in Paragraph 54
24 -- well, back to 53. Do you cite any other evidence?

25 WITNESS PLECKER: No.

1 MS. ANSLEY: Finally, in Paragraph 54, do you
2 see reference there, DWR 514, Figure 14?

3 WITNESS PLECKER: I do.

4 MS. ANSLEY: Which we just looked at, correct?

5 WITNESS PLECKER: Correct.

6 MS. ANSLEY: Is DWR Figure 14 of 514 the basis
7 for your conclusions in Paragraph 54?

8 MR. BEZERRA: Objection. Misstates the
9 testimony. The testimony clearly states there's --
10 it's a comparison between the modeling results and the
11 information regarding vortexing at Folsom Reservoir.
12 Heineken

13 CO-HEARING OFFICER DODUC: Where are you
14 reading from, Mr. Bezerra?

15 MR. BEZERRA: The last line states, "This is
16 just at the level where the effects of the vortex would
17 be encountered." The technical basis for that is much
18 more substantial than DWR 514.

19 CO-HEARING OFFICER DODUC: Ms. Ansley.

20 MS. ANSLEY: Okay. Well, looking at the
21 sentence that says, "According to Figure 14, with the
22 proposed project in 5 percent of the years" -- sure.
23 "According to Figure 14 with the proposed project in 5
24 percent of the years, Folsom Reservoir storage will be
25 drawn down to 90,000 acre-feet or less, slightly above

1 330 feet above mean sea level at the end of September,"
2 is the basis for that sentence and conclusion DWR 514,
3 Figure 14?

4 WITNESS PLECKER: Yes.

5 MS. ANSLEY: Okay. I think I have no further
6 questions for you. Thank you.

7 Good morning, Ms. Lorance.

8 WITNESS LORANCE: Good morning.

9 MS. ANSLEY: This is going to be a similar
10 line. Can you then again confirm that you drafted San
11 Juan Water District 1, Exhibit San Juan Water District
12 1?

13 WITNESS LORANCE: Yes, I did in cooperation
14 with the outside attorney utilizing an initial template
15 in which I then filled in the appropriate information.

16 MS. ANSLEY: And did anyone else assist you in
17 drafting that testimony?

18 WITNESS LORANCE: The testimony was reviewed
19 by Keith Durkin also.

20 MS. ANSLEY: Did Mr. Durkin draft any portions
21 of your testimony?

22 WITNESS LORANCE: I don't think so. It's been
23 a while.

24 MS. ANSLEY: Looking at your testimony
25 starting at Paragraph 35, this begins a section that

1 runs through Paragraph 30 -- runs through Paragraph 58,
2 I believe, entitled "Risks of Injury to San Juan Water
3 District's Water Supply by Proposed Cal WaterFix
4 Project"; is that correct?

5 WITNESS LORANCE: Correct.

6 MS. ANSLEY: Can we look at Paragraph 48,
7 please. I'll try and be quick about this.

8 In this paragraph, you similarly rely on
9 Folsom -- Exhibit Folsom 25. Do you see that?

10 WITNESS LORANCE: I rely on that exhibit
11 relative to the current operations of the program, not
12 per se the more aggressive operations that could be
13 anticipated through this project.

14 MS. ANSLEY: And do you -- do you have any
15 testimony on the anticipated operations of this
16 project?

17 WITNESS LORANCE: Yes. I have to go through
18 and figure out where it was. There is a discussion of
19 a concern that this project allows -- will allow,
20 without appropriate constraints, a more aggressive
21 operation that could thereby put at risk Folsom
22 Reservoir under certain conditions such as dry years
23 following wet years, and a few other scenarios.

24 MS. ANSLEY: And what is the cited basis for
25 your assertion about more aggressive operations?

1 WITNESS LORANCE: The cited basis of that is a
2 professional knowledge of a mechanical engineering
3 degree combined with a civil engineering degree and
4 operations for 20 years and watching Folsom Reservoir
5 drop during the past few years and understanding the
6 constraints that were put on it to not be able to drop
7 in the future may or may not be there under the future
8 project.

9 MS. ANSLEY: Is Paragraph 48 the first
10 instance where you're pointing at the modeling of
11 WaterFix proposed operations?

12 MR. BEZERRA: Vague and ambiguous. First
13 instance where? In the testimony? Out in the real
14 world? In public statements? I mean, there's been a
15 lot of discussion of this project in the world.

16 CO-HEARING OFFICER DODUC: All right,
17 Ms. Ansley. Narrow it down, please.

18 MS. ANSLEY: Okay. In Paragraph 48, I believe
19 is the first time you actually reference a specific
20 piece of testimony regarding the modeling of the Cal
21 WaterFix; is that correct? That would be Exhibit
22 Folsom 25, which is Figure 8 of the recirculated DEIR.

23 WITNESS LORANCE: You'll have to give me a
24 moment. I didn't memorize where first things came up
25 for the first time.

1 MS. ANSLEY: Sure.

2 WITNESS LORANCE: Without me sitting here and
3 reading the whole thing on whether it's the first time
4 or not it came up within my testimony, when I wrote the
5 testimony, I anticipated that the entire testimony was
6 an entire package.

7 And, admittedly, not being an expert at how to
8 write testimony but being an expert at operating San
9 Juan Reservoir and the potential impacts that could
10 occur, I am very comfortable that that modeling does
11 show it's possible that Folsom Lake can be drawn down
12 to low levels.

13 And our ultimate concern is whether or not in
14 the future there's going to be adequate constraints put
15 on by this Board that will restrict that occurring in
16 more conditions in the future.

17 CO-HEARING OFFICER DODUC: Ms. Ansley, I don't
18 see the significance of first time.

19 MS. ANSLEY: That's fine. I'm just trying to
20 figure out where to start. My understanding is I am
21 going to start at Paragraph 48.

22 Is -- your concern is the levels of draw-down
23 in Folsom Reservoir; is that correct?

24 WITNESS LORANCE: My concern is the levels of
25 draw-down in Folsom Reservoir to the point that the

1 Bureau of Reclamation cannot deliver water.

2 MS. ANSLEY: All right. And in Paragraph 48,
3 you make the statement that "The modeling for the
4 WaterFix shows that Folsom Reservoir will be drained to
5 approximately 100,000 acre-feet during 10 percent of
6 all years," correct?

7 WITNESS LORANCE: Under current operation
8 strategies, correct.

9 MS. ANSLEY: So, okay. Can we look at Folsom
10 25 real fast. And this is a similar question that I
11 asked Mr. Plecker and Mr. Yasutake.

12 WITNESS LORANCE: Could we zoom in to that
13 slightly? Unfortunately, I need glasses, and they're
14 not in here.

15 MS. ANSLEY: Sure. Yeah. I'm wearing my
16 glasses, so yes, I understand.

17 MR. OCHENDUSZKO: For all the witnesses, the
18 monitors in front of you can be turned on, and you can
19 see them a little bit more clearly.

20 WITNESS LORANCE: That's better. Okay. Thank
21 you.

22 CO-HEARING OFFICER DODUC: But as you lean in,
23 please bring the microphone with you.

24 WITNESS LORANCE: Thank you.

25 So what was the question?

1 MS. ANSLEY: I'm sorry. Are you ready?

2 The question simply is the same that I asked
3 Mr. Plecker and Mr. Yasutake.

4 Looking at this Figure 8 that you reference in
5 Paragraph 48 as your basis for your assertion that
6 under the modeling scenarios Folsom Reservoir would be
7 drained to approximately 100,000 acre-feet during
8 10 percent of all years, I would like you to confirm
9 that this is also what is shown here for the no action
10 alternative.

11 WITNESS LORANCE: Which is what would be
12 expected with the same operational constraints that are
13 there and the limitations on the Delta.

14 Our concern again is, should those operation
15 strategies change with the opening up of the capability
16 to take water, additional water, that that could
17 change.

18 MS. ANSLEY: Okay. But just for -- yes, thank
19 you. But just for clarification, your answer was yes,
20 right?

21 WITNESS LORANCE: Yes, under existing
22 operations.

23 MS. ANSLEY: Okay. Let's move ahead, then,
24 real fast, to Paragraph 50.

25 MR. BEZERRA: Just for clarity, we're talking

1 about Exhibit SJWD 1, correct?

2 MS. ANSLEY: Oh, yes. I'm sorry.

3 Paragraph 50 of SJWD 1, which is her testimony.

4 MR. BEZERRA: Thank you.

5 MS. ANSLEY: In this paragraph, you reference
6 DWR 514, Figure 14; is that correct?

7 WITNESS LORANCE: Correct.

8 MS. ANSLEY: And based on Figure 14 of DWR
9 514, you state that in 5 percent of years, Folsom
10 Reservoir storage will be drawn down to 90,000 -- I
11 apologize. In Paragraph 50, you state that in
12 5 percent of years Folsom Reservoir storage will be
13 down to 90,000 acre-feet or less, correct?

14 WITNESS LORANCE: Yes. Again, under current
15 operations. And a concern that at that level that
16 we're getting different results within the two and how
17 that could change with different modeling.

18 MS. ANSLEY: If you need to, we can,
19 obviously, bring up DWR 514, Figure 14.

20 But my question to you is does that figure
21 also show the same result for the no action alternative
22 as modeled?

23 MR. BEZERRA: I'm going to object as
24 misstating the evidence. Paragraph 50 there clearly
25 states that it's not clear whether the modeling can go

1 any lower than 90,000 acre-feet. So to the extent it's
2 possible the lake could go even lower than 90,000
3 acre-feet, the modeling may not accurately reflect what
4 may actually occur.

5 MS. ANSLEY: All right. Let's bring up the
6 figure real fast and just finish this. Heineken

7 CO-HEARING OFFICER DODUC: Let's do that.

8 MS. ANSLEY: All right. Looking at Figure 14
9 of DWR 514 on which you rely in Paragraph 50 of your
10 testimony, do you agree that the no action alternative
11 supports the same conclusion that you make in
12 Paragraph 50, at least as far as reading this figure?

13 MR. BEZERRA: Objection. Again misstates the
14 evidence. Paragraph 50 of Ms. Lorance's testimony
15 states that it's not clear whether the modeling is even
16 capable of going below 90,000 acre-feet.

17 MS. ANSLEY: All right. Well, let's go to
18 90,000 acre-feet.

19 Do you agree that this figure shows the same
20 result for all modeling scenarios?

21 WITNESS LORANCE: What I stated in my
22 testimony is a concern that the modeling at the levels
23 in the dry years is showing information relative --
24 which is what it's showing here -- as based on, one,
25 current operations; and, two, it's based on a modeling

1 result that has been discussed as not being accurate.

2 CO-HEARING OFFICER DODUC: Yes, we've heard
3 that from you several times now. Would you please
4 answer Ms. Ansley's question.

5 WITNESS LORANCE: Yes, this figure does show
6 very similar results.

7 CO-HEARING OFFICER DODUC: With all the
8 caveats you've already mentioned.

9 MS. ANSLEY: Thank you. I think that's the
10 end of my questioning.

11 CO-HEARING OFFICER DODUC: Is that the end of
12 your cross-examination?

13 MS. ANSLEY: Yes.

14 CO-HEARING OFFICER DODUC: Before you leave,
15 though, as we are taking into consideration your
16 objection to the testimony of these witnesses, could
17 you point me to where in your written objections that
18 were submitted on February 21st -- I'm sorry --
19 September 21st, did you make these objections with
20 respect to admissibility? I just pulled up, for
21 example, DWR objections to Ms. Lorance's testimony, and
22 I don't see any particular objection regarding her NOI
23 and the scope of her direct testimony. But the
24 Department did submit a variety, numerous documents, so
25 perhaps you could point me to where that is.

1 MR. MIZELL: Tripp Mizell for the Department.

2 We have not filed an objection previously on
3 this particular issue.

4 CO-HEARING OFFICER DODUC: For any of these
5 witnesses?

6 MR. MIZELL: I would have to review the -- our
7 objections more specifically, but I don't believe for
8 the four that we mentioned today.

9 However, I would note that there was an
10 opportunity provided by the Board after their
11 October 7th ruling for parties to self-evaluate based
12 on the testimony and whether or not it's germane to
13 this part of the hearing and permissible, and they
14 haven't revised it.

15 So we are reviewing those who did not choose
16 to resubmit testimony, and these objections are based
17 upon that further review.

18 CO-HEARING OFFICER DODUC: Mr. Mizell, that
19 allowance was for the parties designated and identified
20 by our ruling in October 7th that portions of their
21 testimony should be moved to Part 2, and they were
22 given the opportunity to amend their testimony
23 according to that ruling.

24 And when we resumed last week, I believe it
25 was the petitioner -- in fact I believe it might have

1 been you who pointed out that you don't believe some of
2 those parties did as the Board directed in terms of
3 revising their testimony for Part 1B. And you asked
4 for a chance to comment on that, and I allowed you to
5 comment on that very, very narrow focus of reviewing
6 their resubmitted, or in some cases not resubmitted
7 testimony as to whether or not they comport with our
8 October 7th ruling. It was not an invitation for
9 additional objections.

10 MR. MIZELL: Understood. Thank you.

11 CO-HEARING OFFICER DODUC: All right. Thank
12 you.

13 Ms. Akroyd, you mentioned you had cross-exam.

14 Does anyone else have cross-exam?

15 MS. AUFDEMBERG: No.

16 CO-HEARING OFFICER DODUC: And that was, just
17 for the record, a "no" from Ms. Aufdemberge, the other
18 petitioner.

19 MS. AKROYD: Thank you. Rebecca Akroyd for
20 the San Luis and Delta-Mendota Water Authority.

21 Before I begin cross, I was asked by
22 Mr. Williams for Westlands Water District, which is the
23 next group, to inform the Board that he would not be
24 conducting cross today.

25 CO-HEARING OFFICER DODUC: Thank you.

1 MS. AKROYD: Thank you.

2 So I'd like to begin with questions for
3 Mr. Plecker. Thank you.

4 MR. BEZERRA: If I could make a request. It's
5 been a practice in this hearing to ask the subjects for
6 cross and roughly an estimate of time, given that we're
7 trying to coordinate witnesses, possibly two or three
8 additional panels today. It would be very useful if we
9 could understand how long this cross might go.

10 CO-HEARING OFFICER DODUC: Thank you,
11 Mr. Bezerra.

12 Ms. Akroyd?

13 MS. AKROYD: Sure. I anticipate cross lasting
14 no longer than 20 minutes.

15 CO-HEARING OFFICER DODUC: Okay. Then we will
16 take our lunch break, then. It might be a little bit
17 of a longer lunch break since we have a lot to discuss.
18 So we'll proceed in that manner.

19 MS. AKROYD: Also kind of go into I think what
20 Ryan was going to ask as well in terms of the topic of
21 my cross. Just brief questions regarding -- related to
22 alleged legal injury, going into recent drought
23 certifications filed by the respective agencies
24 represented. That will be the primary topic of cross.

25 CO-HEARING OFFICER DODUC: Thank you.

1 And thank you, Mr. Bezerra, for the reminder.

2 CROSS-EXAMINATION BY MS. AKROYD

3 MS. AKROYD: Thank you.

4 First, Mr. Plecker, I'd like to ask one brief
5 question regarding Roseville's location. Roseville,
6 City of Roseville is located upstream of the new point
7 of diversion proposed in the WaterFix project; is that
8 correct?

9 WITNESS PLECKER: Correct.

10 MS. AKROYD: Thank you. Now turning to
11 drought certifications, do you recall that the City of
12 Roseville recently certified the level of available
13 water supplies it would have, assuming three additional
14 dry years as part of a three-year stress test requested
15 by the Water Board?

16 WITNESS PLECKER: That's correct.

17 MR. BEZERRA: I'd like to object on best
18 evidence. If we're talking from a document, it would
19 be useful if the document could be available.
20 Ms. Akroyd's summarizing the content of a document is
21 not the best evidence of this. And if she has the
22 actual certifications, we should have those in the
23 record.

24 CO-HEARING OFFICER DODUC: Ms. Akroyd?

25 MS. AKROYD: We do have all of those. So go

1 ahead and ask Mr. Long to pull up the folder on the
2 jump drive that I give you for this panel, Panel 5;
3 Group 7, Panel 5.

4 MR. BEZERRA: Then could we please have paper
5 copies of the documents so that everyone could review
6 them, including counsel?

7 MS. AKROYD: I believe all of the documents
8 I'll be citing to and have labeled here with authority
9 exhibit numbers are on the Water Board's website. I
10 don't think in past cross we've been required to bring
11 paper copies, but I'm happy to do that. Again, they're
12 all on the Water Board's website.

13 CO-HEARING OFFICER DODUC: Okay. Let's go
14 ahead and put it up for now, and let's go through them.
15 And in the future if you would make paper copies
16 available, it would be helpful.

17 MR. BEZERRA: Yeah, I'd like to object that I
18 believe all the other cross-examiners have brought
19 paper copies so that the witnesses and counsel could
20 review them as cross-examination proceeds.

21 CO-HEARING OFFICER DODUC: Mr. Kelly?

22 MR. KELLY: If I can add, I actually thought
23 that the -- that this Board directed that we bring
24 paper copies, provide electronic copies, and actually
25 identify them on a spreadsheet. I recall that we had

1 to do that when we were cross-examining petitioners'
2 witnesses earlier in the proceeding.

3 CO-HEARING OFFICER DODUC: If I recall
4 correctly, in Part 1A sometimes that was done after the
5 fact. For now, let's just proceed.

6 MS. AKROYD: Thank you.

7 So first --

8 CO-HEARING OFFICER DODUC: But your objections
9 are noted.

10 MS. AKROYD: Thank you.

11 First if you can please bring up what's listed
12 there as SLDMWA-1. And I'll represent that this is a
13 fact sheet on the State Water Board website regarding
14 the three-year stress test that I mentioned.

15 Are you familiar with the request for stress
16 test submissions?

17 WITNESS PLECKER: Generally, yes.

18 MS. AKROYD: Thank you.

19 MR. BEZERRA: And I'd like to object that if
20 we're talking about a multipage document, the witnesses
21 need some time to review the document before they can
22 testify about whether it accurately is something they
23 understand. Otherwise, they can't testify accurately.

24 CO-HEARING OFFICER DODUC: And I will trust
25 your witnesses to specify they're unable to answer a

1 question because they're not familiar with the content
2 and with the substance of Ms. Akroyd's question.

3 Please continue, Ms. Akroyd.

4 MS. AKROYD: Thank you. And I'll endeavor to
5 keep my questions narrow, and we can go from there.

6 In response to the request for stress test
7 submissions, do you recall that the City of Roseville
8 submitted such a certification?

9 WITNESS PLECKER: I do.

10 MS. AKROYD: Thank you. And do you recall
11 whether in that certification the City of Roseville
12 represented it would have at least a three-year water
13 supply under extended drought conditions?

14 WITNESS PLECKER: We did.

15 MS. AKROYD: Thank you. And the City made
16 that representation based on existing criteria in its
17 contracts and water right permits, correct?

18 MR. BEZERRA: Objection, vague and ambiguous
19 as to "existing criteria in its contracts." If she'd
20 like to provide us the information she's relying on,
21 the witnesses can review it.

22 CO-HEARING OFFICER DODUC: Mr. Plecker, can
23 you answer? Are you able to answer?

24 WITNESS PLECKER: I didn't actually prepare it
25 for the City, so I don't recall the content that went

1 into it. I can imagine that some reflection on our
2 contract capacity would be included in that.

3 MS. AKROYD: Thank you.

4 And where I'm trying to go with this in terms
5 of the relevance is that the various drought
6 certifications are based on circumstances as they are
7 without assurances regarding carryover storage that
8 each of these parties are seeking in this process.

9 MR. BEZERRA: I'm going to object to that
10 representation. Again if we could have the
11 certifications so the witnesses could review them, they
12 can testify precisely as to what's in them rather than
13 relying on Ms. Akroyd's representations.

14 MS. AKROYD: Again we pull up SLDMWA-2.

15 CO-HEARING OFFICER DODUC: Let's pull it up,
16 Ms. Akroyd.

17 And I will again advise the witnesses if
18 you're not able to answer, if it's not within your area
19 of expertise or familiarity, please just say so.

20 WITNESS PLECKER: Thank you.

21 So on the jump drive again, it's SLDMWA --
22 sorry. Let me make sure I'm citing to the right one
23 there. One moment. Dash 5.

24 CO-HEARING OFFICER DODUC: I see Mr. Plecker's
25 name on it, so I assume he's familiar.

1 MS. AKROYD: Does this appear to be -- does
2 this -- this document states that it is the
3 certification of self-certified conservation standard
4 form submitted by the City of Roseville, correct?

5 WITNESS PLECKER: I believe it does.

6 MS. AKROYD: Thank you. And do you recall
7 whether this is -- this was submitted in response to
8 the request for three-year stress tests noted -- we e
9 previously were discussing?

10 WITNESS PLECKER: Yes, I believe it is.

11 MS. AKROYD: Thank you.

12 We can leave it there with Mr. Plecker for now
13 and move on to other witnesses.

14 CO-HEARING OFFICER DODUC: Are you planning to
15 explore similar lines of questioning with the other
16 witnesses?

17 MS. AKROYD: Yes.

18 CO-HEARING OFFICER DODUC: Yeah. Okay. I was
19 thinking -- let's go ahead and proceed, then.

20 MS. AKROYD: Thank you.

21 Similar questions for Mr. Yasutake. Thank
22 you.

23 First, Mr. Yasutake, to confirm the City of
24 Folsom is located upstream of the new points of
25 diversion that are proposed with the California

1 WaterFix project, correct?

2 WITNESS YASUTAKE: Yes.

3 MS. AKROYD: Thank you. And again the same
4 line of questions. Do you recall that the City of
5 Folsom recently certified the level of available water
6 supplies it would have, assuming three additional dry
7 years in response to request for three-year stress test
8 submissions?

9 WITNESS YASUTAKE: Yes.

10 MS. AKROYD: And as part of that
11 self-certification, City of Folsom represented that it
12 would have at least a three-year water supply under
13 extended drought conditions, correct?

14 WITNESS YASUTAKE: That is correct.

15 MS. AKROYD: City of Folsom made that
16 representation based on current conditions and existing
17 criteria in its contracts and water right permits,
18 correct? Heineken

19 MR. BEZERRA: Objection, vague and ambiguous.

20 CO-HEARING OFFICER DODUC: Are you able to
21 answer?

22 WITNESS YASUTAKE: Yes. I relied upon the
23 settlement contracts with the Bureau of Reclamation and
24 Central Valley Project contract as well -- or
25 subcontract with Sac County water agency or Central

1 Valley Project water.

2 MS. AKROYD: Thank you. And now turning to
3 Mr. Fecko, similar line of questions for you. Believe
4 -- we go straight to the draft certification questions
5 there.

6 Do you recall that PCWA recently certified the
7 level of available water supplies it would have,
8 assuming three additional dry years, as part of a
9 three-year stress test requested by the Water Board?

10 WITNESS FECKO: I'm not familiar with the
11 document as it was prepared.

12 MS. AKROYD: Are you familiar with the
13 three-year stress test?

14 WITNESS FECKO: In general, yes.

15 MS. AKROYD: Thank you.

16 If we can please pull up SLDMWA-4.

17 Are you familiar with this document? I
18 believe we can scroll down and it will look the same as
19 the other ones we've been seeing in terms of PCWA's
20 completion of the form.

21 MR. KELLY: I believe Mr. Fecko said that he
22 was not familiar with this document.

23 CO-HEARING OFFICER DODUC: Let's give him a
24 chance to take a look at it.

25 And is that still your answer, Mr. Fecko?

1 WITNESS FECKO: I am generally aware of the
2 three-year stress test. I am not aware of the
3 specifics of what PCA submitted regarding the stress
4 tests.

5 MS. AKROYD: Thank you. Then I'd like to turn
6 to Ms. Lorange.

7 First, can you please confirm that San Juan
8 Water District is located upstream of the new points of
9 diversion?

10 WITNESS LORANCE: Yes.

11 MS. AKROYD: Thank you. And do you recall
12 that the San Juan Water District recently certified the
13 level of available water supplies it would have,
14 assuming three additional dry years, as part of the
15 three-year stress test?

16 WITNESS LORANCE: Assuming three dry years
17 that match the three previous years that we've already
18 encountered with the same demands and same operations,
19 yes, we did. Heineken

20 MS. AKROYD: Thank you. I believe you pretty
21 much answered my next question, but to confirm for the
22 record, as part of the self-certification, San Juan
23 represented it would have at least a three-year water
24 supply under extended drought conditions, correct?

25 WITNESS LORANCE: Yes. I feel like I'm

1 repeating myself again. But, yes, based on those same
2 criteria that I mentioned previously and our water
3 rights and the requirement that the water would be
4 supplied to us. Yes.

5 MS. AKROYD: Thank you.

6 With that, I have no further questions.

7 CO-HEARING OFFICER DODUC: Let me just get a
8 clarification from you.

9 Mr. Fecko was unable to answer a question that
10 might have been directed at Mr. Maisch. Do you wish to
11 cross-exam Mr. Maisch when he's available?

12 MS. AKROYD: No. I think we'll be fine.

13 CO-HEARING OFFICER DODUC: Any redirect?
14 Actually, let me confirm no more cross-examination.
15 All right.

16 Any redirect, Mr. Bezerra and Mr. Kelly?

17 MR. BEZERRA: If I can take just a couple
18 minutes to think about what we've heard.

19 CO-HEARING OFFICER DODUC: Mr. Kelly?

20 MR. KELLY: I have one question for Mr. Fecko.

21 Mr. Fecko, are the concerns that you expressed
22 of the California WaterFix based on MBK's conclusion
23 that Folsom could be operated differently with WaterFix
24 in place and based in part on Mr. Bourez's general
25 critique of the project proponents' modeling?

1 WITNESS FECKO: That's right. I think what
2 Mr. Maisch and I prepared for his testimony essentially
3 said that we relied on -- let me get this right -- the
4 WaterFix modeling itself but also the work and
5 testimony by MBK Engineers on behalf of the Sacramento
6 Valley water users. Both of those things is what we
7 relied on for our opinion.

8 MR. KELLY: Thank you.

9 No further redirect.

10 CO-HEARING OFFICER DODUC: Mr. Bezerra.

11 MR. BEZERRA: Yes, I think I have a couple of
12 questions, and what I'd like to do is just ask one
13 question that each of our three clients can answer in
14 order as opposed to asking a bunch of serial questions
15 that are the same.

16 So, Mr. Yasutake, Ms. Lorance and Mr. Plecker,
17 in offering your conclusions about how the California
18 WaterFix project may affect your agencies' respective
19 water supplies, how did you consider the operations of
20 the project, the Central Valley Project that actually
21 occurred in 2014 and 2015?

22 WITNESS LORANCE: This is Shauna Lorance, and
23 my response was that considered the fact and the
24 significantly low level at which the lake dropped and
25 the concern that there would be an inability to provide

1 water to San Juan Water District and the concern that,
2 if the operation of the project was more aggressive,
3 that that could happen in more years.

4 CO-HEARING OFFICER DODUC: Hold on a second.

5 Ms. Ansley?

6 MS. ANSLEY: Yes, just very quickly. We would
7 like to object because this is beyond the scope of the
8 cross in terms of the -- I didn't ask any questions
9 regarding 2014-2015 operations.

10 CO-HEARING OFFICER DODUC: Hold on. I'm not
11 sure I understand your objection.

12 MS. ANSLEY: This redirect is beyond the scope
13 of anyone's cross-examination -- or my
14 cross-examination, specifically.

15 CO-HEARING OFFICER DODUC: You asked a lot of
16 questions regarding the operations, the modeling, and
17 especially about -- actually, was it you or Ms. Akroyd,
18 regarding operations under the recent drought
19 condition? Or at least testimony was provided with
20 respect -- comparing it to the conservation drought
21 operations, projections, and how things were being
22 projected with respect to Ms. Akroyd's, in particular,
23 lines of questioning.

24 So I'm going to allow the redirect.

25 MS. ANSLEY: Okay.

1 CO-HEARING OFFICER DODUC: Now you have to ask
2 the question again, Mr. Bezerra.

3 MR. BEZERRA: Hopefully, I can.

4 The question is, each of you, how did you
5 consider the operations of Folsom Reservoir in 2014 and
6 2015 in reaching your conclusions about the possible
7 impacts of California WaterFix on your respective
8 agencies?

9 CO-HEARING OFFICER DODUC: Thank you. That's
10 what I thought I heard. Okay.

11 WITNESS YASUTAKE: Okay. I'll just follow up.
12 Marcus Yasutake, City of Folsom.

13 I have the same concerns as Ms. Lorance
14 stated, but what we did is when you look at the
15 operations in 2014 and 2015 without the project and you
16 see some of the modeling results that have presented --
17 that we have presented in our testimony, and lake
18 levels get below to where we were when emergency pump
19 stations were included for the City of Folsom and
20 Folsom Prison, it is a concern for us that that is a
21 risk to the City's availability to receive water from
22 Folsom Reservoir and not receive our contract
23 entitlement supplies.

24 WITNESS PLECKER: In thinking about the
25 question, in terms of putting together, you know, our

1 thoughts and our response, I'm reminded of the
2 conditions that happened between 2013 and 2014 which in
3 my mind is a preview as to what the California WaterFix
4 could potentially do.

5 Recall that in 2013 the Folsom Reservoir at
6 least in part was operated fairly aggressively followed
7 by a dry year. That is exactly or nearly exactly a
8 condition which we could potentially face with the
9 WaterFix, absent conditions. So that was a new
10 experience for us.

11 2015, in my mind, was about lack of snow pack
12 and continued operations to meet environmental needs on
13 the Sacramento River side.

14 So I would say in formulating our opinion with
15 respect to what our thoughts are on the California
16 WaterFix, I think it's informed by modeling. It's
17 informed by a lot of technical matters and direct
18 observations that, as water managers, we make on a
19 daily basis.

20 MR. BEZERRA: I have no further redirect.

21 CO-HEARING OFFICER DODUC: Right. Any
22 recross?

23 MS. AKROYD: Yes.

24 CO-HEARING OFFICER DODUC: Come on up,
25 Ms. Akroyd.

1 MS. AKROYD: Thank you. Rebecca Akroyd for
2 the San Luis and Delta-Mendota Water Authority.

3 I believe each of you just testified relating
4 to your concerns for injury from the California
5 WaterFix project, that those concerns in part were
6 based on 2014 and 2015 conditions.

7 My question is if there are such concerns
8 regarding low reservoir storage in 2014 and 2015, what
9 was the basis for -- we can go down the list -- each of
10 the parties' three-year drought certifications based on
11 recent conditions?

12 MR. KELLY: If I can just object for the
13 record.

14 Ms. Akroyd said that each of them just
15 testified about 2013-2014 drought operations.

16 CO-HEARING OFFICER DODUC: 2014 --

17 MR. KELLY: Mr. Fecko did not. So I just -- I
18 assume that she's simply asking the question to the
19 people that responded.

20 MS. AKROYD: Yes.

21 CO-HEARING OFFICER DODUC: That's correct.

22 MS. AKROYD: Thank you. For clarification.

23 MR. KELLY: Just for the record. Thank you.

24 CO-HEARING OFFICER DODUC: Everyone except
25 Mr. Fecko may answer.

1 WITNESS YASUTAKE: All right. Marcus
2 Yasutake, City of Folsom.

3 We based -- the City based its three-year
4 stress test on, as I mentioned before, the existing
5 settlement contracts we have with the Bureau of
6 Reclamation, that the City has with the Bureau of
7 Reclamation and the Central Valley Project water
8 service contract with -- subcontract with Sac County
9 Water Agency through the Bureau of Reclamation.
10 Heineken

11 MS. AKROYD: Thank you.

12 And then for each of the other witnesses.

13 WITNESS LORANCE: For San Juan Water District,
14 we based ours on the previous three years, the previous
15 three years' hydrology and the previous three years'
16 operation. And as we had gotten through those previous
17 three years with those three droughts, we projected
18 that we would again have our full pre-1914 water rights
19 as well as an adequate supply. Our issue is not a
20 supply issue; our issue is the ability to get our
21 supply.

22 MS. AKROYD: Thank you.

23 WITNESS PLECKER: So what my panel has
24 testified, with one difference. I didn't actually
25 prepare the stress-test analysis, and I don't recall

1 the substantive procedure that was prescribed in
2 following that. However, I'm reasonably assured -- I
3 have a very competent staff. They followed the rules.
4 They examined it from multiple directions. And if they
5 said what they said, I'm entirely confident in what
6 they said.

7 MS. AKROYD: Thank you. No further questions.

8 CO-HEARING OFFICER DODUC: Thank you,
9 Ms. Akroyd.

10 And that completes the testimony for this
11 panel. Thank you very much. You're dismissed.

12 Before we break for lunch, let's do a bit of a
13 time check here.

14 I have Group 8 slated to go when we resume.

15 Ms. Nikkel, that's yours, I assume, and at
16 least on my notes, you're only requesting ten minutes
17 for Mr. Sutton for direct.

18 What cross-examination does the department --
19 both departments plan on undertaking? This would be
20 for Group 8. Was there any planned cross-examination
21 for Mr. Sutton?

22 MS. AUFDEMBERGE: Amy Aufdemberge, Department
23 of Interior. If we have any, it would be ten minutes
24 or less.

25 MR. MIZELL: The same time frame goes for the

1 department.

2 CO-HEARING OFFICER DODUC: All right. Which
3 means, then, we won't have time today to move on to
4 Panel 7 for Group 7.

5 MR. BEZERRA: Yes, Panel 7 is prepared to
6 testify. The concern I have is -- it's not a concern;
7 it's more of a question -- how long cross-examination
8 of that panel may go because then we have Panel 6
9 coming up, and if they don't need to be here this
10 afternoon, I --

11 CO-HEARING OFFICER DODUC: Which is what I'm
12 trying to ascertain.

13 MR. BEZERRA: Thank you.

14 CO-HEARING OFFICER DODUC: On my list I have
15 Panel 7 before Panel 6. Are you suggesting that Panel
16 6 go before Panel 7?

17 MR. BEZERRA: No. We have Panel 7, the
18 American River experts, will follow Group 8.

19 CO-HEARING OFFICER DODUC: Okay. Will follow
20 Group 8.

21 How much time do you anticipate for direct of
22 Panel 7?

23 MR. BEZERRA: I believe that's 40 minutes or
24 so. There's three different presentations.

25 CO-HEARING OFFICER DODUC: And planned cross

1 of Panel 7?

2 MR. MIZELL: Tripp Mizell for the Department
3 of Water Resources.

4 I believe since Panel 7 is going to be the
5 technical basis for the American River contractors, we
6 will anticipate up to three hours if the Board grants
7 that to us.

8 CO-HEARING OFFICER DODUC: Okay. I think it's
9 safe to say we will not get to Panel 6 today.

10 MR. BEZERRA: It sounds like that. So I'd
11 like to release them to go do their other things.

12 CO-HEARING OFFICER DODUC: Yes, you may do so.

13 And while we are at it, Panel 6, you are
14 anticipating how much time for direct?

15 MR. BEZERRA: I don't represent all of those
16 agencies. I believe that it's 40 minutes to an hour.
17 There's four different agencies presenting direct
18 evidence in that panel.

19 CO-HEARING OFFICER DODUC: And anticipated
20 cross for Panel 6?

21 MR. MIZELL: Tripp Mizell, DWR. I would
22 anticipate something just shy of an hour.

23 CO-HEARING OFFICER DODUC: Okay.

24 MS. AKROYD: Rebecca Akroyd for San Luis and
25 the Delta-Mendota Water Authority.

1 We would anticipate approximately 20 minutes
2 for Panel 6.

3 CO-HEARING OFFICER DODUC: What I'm trying to
4 do is plan out for tomorrow. So I am alerting the
5 combined Group 7 and 15 who are on this table of order
6 of presentation for Part 1B as being, in order, No. 2;
7 that they should be prepared to come tomorrow.

8 Except -- hold on. Except there was a request
9 this morning by Mr. Aladjem, potentially for
10 Dr. Paulsen to attend Thursday afternoon. Okay. We're
11 going to have to discuss that during our break. Never
12 mind.

13 For now, Mr. Bezerra, you may let your
14 witnesses for Panel 6 go for today. We will take them
15 up tomorrow.

16 MR. BEZERRA: We'll be here bright and early
17 at 9:00 a.m. tomorrow with that panel.

18 CO-HEARING OFFICER DODUC: Okay. Ms. Nikkel?

19 MS. NIKKEL: I -- Meredith Nikkel. I'm here
20 for -- I don't represent Dave Aladjem. But for City of
21 Brentwood, I believe he represented that his expert
22 could be available either tomorrow or next Thursday.

23 CO-HEARING OFFICER DODUC: Yes.

24 MS. NIKKEL: Just want to make sure --

25 CO-HEARING OFFICER DODUC: We have not yet

1 decided whether to slot them in tomorrow or next
2 Thursday, and that's what we will need to discuss.

3 MS. NIKKEL: Just wanted to clarify. Thank
4 you.

5 CO-HEARING OFFICER DODUC: Mr. Kelly.

6 MR. KELLY: Yes, just a procedural question.
7 There were some objections lodged this morning with
8 respect to the testimony. We provided a very brief
9 response kind of on-the-fly to that.

10 If the hearing team is going to consider that
11 objection, I'm just wondering whether or not you want a
12 formal response from us to those objections?

13 CO-HEARING OFFICER DODUC: We will let you
14 know when we resume.

15 MR. KELLY: Thank you.

16 CO-HEARING OFFICER DODUC: Let's go -- was
17 there something else, Mr. Bezerra?

18 MR. BEZERRA: Yeah, Chair Doduc, one question,
19 and this is certainly something we can pick up after
20 lunch.

21 But I believe your direction on seeking to
22 admit exhibits into the record was that we should do
23 that at the close of a group's presentation.

24 So Panel 6 will be the close of Group 7's
25 presentation. What we propose do to, all of that

1 group, would be to offer those exhibits in writing in a
2 day or two after tomorrow, similar to what DWR did.

3 CO-HEARING OFFICER DODUC: Okay. All right.

4 With that, not seeing any other hands, we will
5 take our lunch break now, and we will resume at 1:30.

6 MS. RIDDLE: You've also got panel -- you've
7 also got joint testimony with Group 15.

8 MR. BEZERRA: And I can't speak to how that
9 panel will be handled. I don't represent anyone on
10 that panel. I will defer to their attorneys. I'm
11 certainly happy to have them join our joint effort if
12 that's what they prefer, but they may not.

13 MR. FERGUSON: Yeah, Erin Ferguson with
14 Sacramento County Water Agency, which is on that joint
15 panel with the East Bay Municipal Utility District.

16 Did you have a specific question?

17 MS. RIDDLE: There was an offer to enter your
18 evidence in for Group 7. Is there a proposal on the
19 table for --

20 CO-HEARING OFFICER DODUC: Which we are not
21 considering yet because they are not submitting their
22 evidence right now.

23 So work it out and let us know afterwards when
24 we resume.

25 (Whereupon, the luncheon recess was taken

1 at 12:09 p.m.)

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AFTERNOON SESSION

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(All parties having been duly noted for the record, the proceedings resumed at 1:31 p.m.)

CO-HEARING OFFICER DODUC: All right. It is 1:30. Welcome back, everyone.

A little bit of housekeeping before we begin with Group 8. All right. First of all, let me rule on the Department of Water Resource's objection stated earlier today with respect to Group 7, Panel 7's [sic] testimony being outside the scope of their NOI.

The objection is overruled. It is a late submission. Objections with respect to admissibility were due in September.

With respect to Mr. Aladjem's request for the City of Brentwood, Group 10 -- well, part of Group 10, to present their expert witness Dr. Paulson either tomorrow or Thursday November 3rd, we will hear from Dr. Paulson on Thursday, November 3rd.

Also in concert of that -- concert with that, because Dr. Paulson is also testifying on behalf of Antioch and Mr. Emrick is there, Mr. Emrick, you are directed to work with Mr. Aladjem and coordinate Dr. Paulson's testimony. We will also take Antioch's

1 case in chief, those that are specific to what
2 Dr. Paulson will be testifying, at the same time that
3 she's up here for Brentwood.

4 MR. EMRICK: Thank you.

5 CO-HEARING OFFICER DODUC: Come on up.

6 MR. EMRICK: Thank you. So long as we realize
7 that my representative, Mr. Ron Bernal, will not be
8 available until after that.

9 CO-HEARING OFFICER DODUC: Correct. We are
10 splitting up your panel to accommodate Dr. Paulson's
11 schedule.

12 MR. EMRICK: Thank you.

13 CO-HEARING OFFICER DODUC: Okay. And then
14 with respect to this whole scheduling as we go along,
15 we're just going to have to play it by ear as we go
16 along. I will do my best, with all of your help, try
17 to sort of scope out in advance the next two, three
18 days of testimony and cross-examination. And we will
19 just have to do our best to accommodate, to the extent
20 we can without hindering the efficiency of the hearing,
21 the order of direct testimony and cross-examination.

22 So in that light, let me make sure now to let
23 everyone know that today we are hearing from Group 8.
24 Then we also will take that Group 7, Panel 7, call them
25 back tomorrow if necessary. But we will also likely

1 get to Group 7, Panel 6 tomorrow as well. And to the
2 extent that we have time tomorrow, we will also take up
3 the combined Groups 7 and 15 panel that is slotted in
4 the second slot on the order of direct. And actually
5 that goes also for Group 9, Group 10 -- except for
6 Brentwood -- Group 13, Group 15. All of you are on
7 notice that you might be called as early as this week,
8 depending on how it goes.

9 And on Friday, we will begin -- well, we will
10 include the remaining witness, Mr. Orme, from Panel 4
11 of Group 7. And, again, we will continue to go down
12 the order of direct in the chart that you all have that
13 is also posted on the website.

14 So for today and as we go about -- this may
15 change tomorrow. But for today, I'm putting Group 7
16 and 15, the joint panel, Group 9, Group 10 with the
17 exception of Brentwood, Group 13, and Group 15, the
18 EB MUD-only panel, you're all on notice that you may be
19 appearing as early as this week. And you have until
20 5:00 p.m. today to send an e-mail to us if you
21 anticipate a scheduling conflict or the inability to
22 appear this week.

23 That's my best-estimate projection of the next
24 two days as of this moment. We may revisit that
25 tomorrow. Any questions?

1 Mr. Bezerra?

2 MR. BEZERRA: One very, very brief
3 clarification for the record. In ruling on DWR's
4 notice of intent objection, I think you said that you
5 were ruling on the objection to Group 7, Panel 7.

6 It's Group 7, Panel 5. I just want to make
7 sure the record's clear.

8 CO-HEARING OFFICER DODUC: I'm sorry. Was it
9 Group 5? Yes, you're right, it is Group 5 -- Panel 5,
10 Group 7.

11 MR. BEZERRA: Yes, thank you very much.

12 CO-HEARING OFFICER DODUC: Thank you for that
13 correction, yes.

14 All right. Was there anything else? After my
15 attorney just joined me -- after I totally just wing it
16 without you, Ms. Heinrich.

17 All right. With that, then, we will look to
18 Ms. Nikkel to present Group 8's direct.

19 MS. NIKKEL: Thank you.

20 CO-HEARING OFFICER DODUC: Do you have an
21 opening statement, or should I swear your witness in
22 now?

23 MS. NIKKEL: I have a very brief opening
24 statement.

25 CO-HEARING OFFICER DODUC: Okay.

1 MS. NIKKEL: So, thank you. We'll hold that.

2 I'm Meredith Nichol for the Tehama Colusa
3 Canal Authority. The Authority did submit a written
4 opening statement, but I just want to highlight a
5 couple of things here.

6 The Authority, on behalf of its water service
7 contractors within its service area, will offer the
8 testimony of its general manager, Jeff Sutton. The
9 water service contracts that Mr. Sutton will describe
10 entitle the contractors within the Authority service
11 area to a specified amount of water whenever
12 Reclamation is able to deliver it.

13 The testimony of Mr. Sutton, together with the
14 testimony offered previously by Mr. Bourez and
15 Mr. Easton show that, under a realistic operational
16 scenario, the proposed WaterFix project will reduce
17 allocations to the water service contractors within the
18 Tehama Colusa Canal Authority below the allocations
19 that Reclamation would have been able to make without
20 the proposed project.

21 This alone reveals significant injury to the
22 legal users of water within the Authority service area.
23 And with that, we're ready to present our direct
24 testimony.

25 CO-HEARING OFFICER DODUC: All right.

1 Please stand and raise your right hand.

2 (Witness sworn)

3 JEFFREY SUTTON,

4 called as a witness on behalf of Protestant

5 Group 8, having been first duly sworn, was

6 examined and testified as hereinafter set

7 forth:

8 CO-HEARING OFFICER DODUC: Thank you.

9 DIRECT EXAMINATION OF JEFF SUTTON BY MS. NIKKEL

10 MS. NIKKEL: Would you please state your name

11 and spell your last name for the record.

12 WITNESS SUTTON: Jeffrey Mark Sutton,

13 S-U-T-T-O-N.

14 MS. NIKKEL: And, Mr. Sutton, you understand

15 that you are presenting your testimony today under

16 oath, correct?

17 WITNESS SUTTON: Correct.

18 MS. NIKKEL: Are you familiar with what is

19 labeled Exhibit TCCA-1?

20 WITNESS SUTTON: I am.

21 MS. NIKKEL: And is Exhibit TCCA-1 an accurate

22 statement of your testimony in this proceeding?

23 WITNESS SUTTON: It is.

24 MS. NIKKEL: Mr. Sutton, are you familiar also

25 with the exhibits labeled SVWU 100 through 110, which

1 is the testimony and supporting documentation prepared
2 by MBK Engineers for this proceeding?

3 WITNESS SUTTON: I am.

4 MS. NIKKEL: Is that testimony and those
5 reports contained in those exhibits the type of
6 information you review and rely on as TCCA's general
7 manager to assess potential risks and impacts to TCCA's
8 water supplies and operations?

9 WITNESS SUTTON: Yes, it is, regularly.

10 MS. NIKKEL: Mr. Sutton, would you please
11 summarize your written testimony.

12 WITNESS SUTTON: Yes, the Tehama Colusa Canal
13 Authority is a joint powers authority made up of 17 ag
14 water service contractors, all having contracts with
15 the Central Valley Project, Bureau of Reclamation. Our
16 service area is 150,000 acres of irrigated farmland
17 located along the west side of the Sacramento Valley
18 north of the Delta in the counties of Yolo, Colusa,
19 Glenn, and Tehama.

20 The Tehama Colusa Canal Authority operates and
21 maintains 140-mile dual canal system made up of the
22 Tehama Colusa Canal and the Corning Canal to service
23 the farmlands served thereby. And TCCA was formed in
24 part to secure a reliable water supply that would meet
25 the needs of the member agencies and to exercise the

1 member agencies' rights to water originating in the
2 Sacramento Valley.

3 The Water Districts within the TC service area
4 have all executed long-term water service contracts
5 with the Bureau of Reclamation for the delivery of CVP
6 water and have renewed those contracts on a long-term
7 basis.

8 Lastly, I'd like to add under -- based on our
9 reliance on the MBK analysis, under a realistic
10 operations scenario for the proposed project, it is
11 reasonable to expect that deliveries to water service
12 contractors within the TC service area will on average
13 decrease by approximately 14,000 acre-feet annually in
14 all year types. Operation of the CVP in this manner
15 will reduce allocations to TC contractors below the
16 allocations Reclamation would make without the proposed
17 project and, most of concern to us, in below normal
18 years up to 62,000 acre-feet of lost allocation water
19 supplies.

20 MS. NIKKEL: That concludes my direct
21 examination.

22 CO-HEARING OFFICER DODUC: Thank you,
23 Ms. Nikkel. Cross-examination by the Department of
24 Water Resources?

25 MR. MIZELL: The Department doesn't have any

1 cross-examination at this time.

2 CO-HEARING OFFICER DODUC: Does Department of
3 Interior?

4 MS. AUFDEMBERG: No.

5 CO-HEARING OFFICER DODUC: That was no from
6 Ms. Aufdemberg.

7 Anyone else wishing to conduct
8 cross-examination?

9 Ms. Akroyd?

10 MS. AKROYD: Yes.

11 CROSS-EXAMINATION BY MS. AKROYD

12 MS. AKROYD: Good afternoon. Rebecca Akroyd
13 for San Luis and Delta-Mendota Water Authority.

14 Now, first, Mr. Sutton, I'd like to briefly
15 confirm that each of TCCA's member agencies are located
16 upstream of the new points of diversion proposed with
17 the WaterFix Change Petition, correct?

18 WITNESS SUTTON: Correct.

19 MS. AKROYD: If we could bring up TCCA-1,
20 Mr. Sutton's testimony. And go to Page 6, please.

21 Then at Lines 19 to 23, there, you testify
22 that, to the extent that reduced deliveries to water
23 service contractors within TCCA's service area are made
24 in order to increase the supplies to users outside of
25 the area of origin, the proposed project will result in

1 injury to the entities within TCCA's service area.

2 Do you see that?

3 MS. NIKKEL: I'm going to object as
4 mischaracterizing the testimony, unless I missed the
5 reference. Could you repeat where you're looking in
6 the testimony?

7 MS. AKROYD: Page 7, Lines 19 to 23.

8 MS. NIKKEL: There it is. Thank you.

9 MS. AKROYD: Then in your written testimony,
10 you incorporate Mr. Bourez's testimony and his written
11 report by reference, correct?

12 WITNESS SUTTON: I apologize. I was trying to
13 catch up to some of your points. Could you ask your
14 question again?

15 MS. AKROYD: Sorry. Let me look at my hard
16 copy, make sure I'm citing to the right place.

17 CO-HEARING OFFICER DODUC: Is this the right
18 page?

19 MS. NIKKEL: I believe, Mr. Baker, we need to
20 be on Page 7.

21 MS. AKROYD: Yes, sorry.

22 WITNESS SUTTON: Oh, okay. Thank you. I was
23 struggling.

24 MS. AKROYD: There we go. Page 7, Lines 19 to
25 23, if you can just read that to yourself, and then go

1 on to the next point.

2 WITNESS SUTTON: Yes, I've read that.

3 MS. AKROYD: Thank you. And in your written
4 testimony and I believe in your summary today, you
5 incorporate Mr. Bourez's testimony and his written
6 report by reference, correct?

7 WITNESS SUTTON: Correct.

8 MS. AKROYD: And Mr. Bourez has testified
9 that, under his modeling with the tunnels in place,
10 Reclamation could deliver more water to the CVP
11 contractors south of Delta than it does currently,
12 potentially resulting in less water available for
13 delivery to CVP contractors north of the Delta,
14 correct?

15 WITNESS SUTTON: Correct.

16 MS. AKROYD: Now, Mr. Sutton, in 2010 TCCA
17 filed a lawsuit alleging it had a priority right to CVP
18 water over south of Delta CVP contractors, correct?

19 WITNESS SUTTON: Correct.

20 MS. AKROYD: And in 2011, the district court
21 rejected TCCA's claims; is that right?

22 WITNESS SUTTON: Yes.

23 MS. AKROYD: The district court also held that
24 TCCA members' existing entitlements to CVP water are
25 governed by the terms of their CVP water service

1 contracts, correct?

2 MS. AKROYD: I believe that's correct.

3 CO-HEARING OFFICER DODUC: Mr. Sutton, are you
4 familiar with this?

5 WITNESS SUTTON: I'm very familiar with the
6 case, but trying to pull out individual lines of the
7 holding, which was a -- I want to say over 80 pages,
8 I'd be struggling to recall exactly what it said, so.

9 CO-HEARING OFFICER DODUC: Okay. Just answer
10 to the best --

11 WITNESS SUTTON: I probably need to say I
12 don't recall exactly.

13 MS. AKROYD: Okay. Do you recall whether the
14 Court held that, under TCCA's members' contracts, they
15 have no higher priorities than CVP water service
16 contractors located south of the Delta?

17 WITNESS SUTTON: Generally, I believe that was
18 one of the holdings, yes.

19 MS. AKROYD: And in 2013, the Ninth Circuit
20 affirmed the district court's decision, correct?

21 WITNESS SUTTON: Correct.

22 MS. AKROYD: I have no further questions.

23 CO-HEARING OFFICER DODUC: Thank you.

24 Any additional cross?

25 (No response)

1 CO-HEARING OFFICER DODUC: Not seeing any, any
2 redirect, Ms. Nikkel?

3 MS. NIKKEL: No redirect at this time, thank
4 you.

5 CO-HEARING OFFICER DODUC: Thank you. Does
6 that conclude the direct testimony for Group 8?

7 MS. NIKKEL: It does.

8 CO-HEARING OFFICER DODUC: Do you wish to move
9 your exhibits into evidence at this time?

10 MS. NIKKEL: We do.

11 CO-HEARING OFFICER DODUC: Hold on a second.
12 We have technical difficulties. At this time,
13 we are going to take a short break. We will resume at
14 2:00 o'clock.

15 (Recess taken)

16 CO-HEARING OFFICER DODUC: All right. Thank
17 you all for your patience. We are back in session.

18 And, Ms. Nikkel, you have concluded your
19 direct testimony and move your evidence -- your
20 exhibits into evidence.

21 I just want to note here that there's an
22 outstanding objection filed by the San Luis
23 Delta-Mendota Water Authority on the grounds that
24 Mr. Sutton's testimony lacks foundation, relevance, is
25 speculative, and calls for a legal conclusion.

1 The relevancy objections concerning his
2 testimony about the potential impacts of new Delta flow
3 criteria is what I will be focusing on. San Luis and
4 Delta-Mendota argue that this is irrelevant because it
5 does not concern the impacts of the proposed changes to
6 points of diversion.

7 Consistent with our October 7th ruling, this
8 issue should be presented in Part 2 of the hearing;
9 therefore, the relevancy objection is sustained and the
10 portion of the testimony concerning this issue is not
11 admitted into evidence. The rest of the testimony is
12 admitted into evidence. And we will consider the
13 remaining objections when determining what weight to be
14 afforded to this testimony.

15 MS. NIKKEL: Thank you.

16 CO-HEARING OFFICER DODUC: All right? Thank
17 you, Ms. Nikkel.

18 All right. With that, we will now return to
19 Group 7, Panel 7. And Mr. Ferguson?

20 MR. FERGUSON: Yes, good afternoon.

21 CO-HEARING OFFICER DODUC: Do you have an
22 opening statement?

23 MR. FERGUSON: I do have a brief opening
24 statement on behalf of the Sacramento County Water
25 Agency.

1 CO-HEARING OFFICER DODUC: Okay. We'll hear
2 that before administering the oath.

3 MR. FERGUSON: Thank you very much.

4 The Sacramento County Water Agency is a
5 special district charged with making water available
6 for the beneficial use of the lands and inhabitants
7 within Sacramento County. The water agency currently
8 serves over 50,000 households and is the primary water
9 supplier for the major growth areas of unincorporated
10 Sacramento County and the cities of Rancho Cordova and
11 Elk Grove.

12 In this proceeding, by and through its
13 partnerships, the water agency has and will present
14 evidence that the petitioner's modeling is flawed,
15 doesn't accurately represent the State Water Project
16 and Central Valley Project as they would be
17 realistically operated with the project in place.

18 As shown by MBK Engineers and as will be
19 discussed tomorrow by Michael Peterson, the agency's
20 engineer, under more realistic operation scenarios,
21 impacts of the project as compared to the no-action
22 alternative would reduce the water agency's CVP
23 deliveries and increase the frequency of Term 91
24 curtailments, thereby affecting availability of the
25 water agency supplies and reducing carryover storage in

1 Folsom Reservoir, thereby decreasing the likelihood
2 that the water agency's contract totals can be
3 delivered.

4 The water agency, in conjunction with East Bay
5 MUD, will present evidence that the increased frequency
6 and duration of reverse flow events requiring shutdown
7 of the Freeport Regional Water Project intake will
8 constrain the water agency's diversions of both service
9 and remediated groundwater.

10 Today, you will hear from agency experts that
11 will demonstrate that the petitioners have not
12 adequately evaluated the proposed project's potential
13 to detrimentally affect long-term groundwater supplies
14 in the sub-basin underlying the central part of
15 Sacramento County in the water agency service area.

16 The water agency urges this board's careful
17 attention to the protestants' evidence and its
18 demonstration that the petitioners have failed to
19 adequately prove that the proposed project and
20 requested change does not harm the water right holders
21 including the water agency.

22 CO-HEARING OFFICER DODUC: Does that conclude
23 your opening statement?

24 MR. FERGUSON: Yes, it does.

25 CO-HEARING OFFICER DODUC: Thank you,

1 Mr. Ferguson.

2 Will the witnesses please rise and raise your
3 right hands.

4 (Panel sworn)

5 JEFF WEAVER, PRAVANI VANDEYAR, BONNY STARR,

6 STEFFEN MEHL, and LAURA FOGLIA,

7 called as Panel 7 witnesses by Group 7,

8 having been first duly sworn, were

9 examined and testified as hereinafter

10 set forth:

11 CO-HEARING OFFICER DODUC: Thank you. You may

12 begin, Mr. Ferguson.

13 DIRECT EXAMINATION OF PANEL 7 BY MR. FERGUSON

14 MR. FERGUSON: This afternoon, I will be
15 examining Dr. Steffen Mehl and Dr. Laura Folgia, who
16 are experts here, on behalf of the Sacramento County
17 Water agency.

18 So Dr. Mehl, can you please state your name
19 for the record.

20 WITNESS MEHL: Yes, my name is Steffen Mehl.

21 CO-HEARING OFFICER DODUC: I don't think your
22 microphone is on.

23 WITNESS MEHL: Stephan Mehl.

24 MR. FERGUSON: Dr. Mehl, does Exhibit SCWA 50
25 with the correction contained in the notice of errata

1 and supplemental testimony filed on October 24th, 2016
2 constitute a true and correct copy of your testimony?

3 WITNESS MEHL: Yes.

4 MR. FERGUSON: Does SCWA 41 contain a true and
5 correct copy of your statement of qualifications?

6 WITNESS MEHL: Yes.

7 MR. FERGUSON: Did you prepare and finalize
8 your testimony for this proceeding?

9 WITNESS MEHL: Yes, with some documents from
10 SCWA.

11 MR. FERGUSON: Okay. Thank you.

12 Dr. Foglia, could you please state your name
13 for the record?

14 WITNESS FOGLIA: My name is Laura Foglia.

15 MR. FERGUSON: Does SCWA 38 contain a true and
16 correct copy of your testimony?

17 WITNESS FOGLIA: Yes, it does.

18 MR. FERGUSON: Does SCWA 43 contain a true and
19 correct copy of your statement of qualifications?

20 WITNESS FOGLIA: Yes.

21 MR. FERGUSON: And did you prepare and
22 finalize your testimony in this proceeding?

23 WITNESS FOGLIA: Yes.

24 MR. FERGUSON: Thank you. Can we please go
25 ahead and bring up SCWA 48 errata.

1 MR. BAKER: 48 errata? Or did you mean a
2 different exhibit?

3 MR. FERGUSON: No, 48.

4 Thank you. Dr. Mehl, can you please introduce
5 yourself and generally summarize your work on behalf of
6 Sacramento Valley Water Agency in this proceeding.

7 WITNESS MEHL: Yes. So I'm a professor at
8 Chico in the Department of civil engineering, and I'm
9 serving as a consultant to Larry Walker & Associates.

10 SCWA had concerns about the potential impacts
11 of the California WaterFix project on groundwater
12 within the central basin, which is a management area
13 within the Sacramento -- South American Sub-basin, and
14 that's adjacent to where the planned North Delta
15 diversions are located. They requested that we
16 evaluate the potential impact of the California
17 WaterFix on groundwater resources in the South American
18 Sub-basin.

19 Recognizing that the planned diversions would
20 affect the stream flows and that streams and aquifers
21 are interconnected with one another and they can
22 interact with one another, I reviewed the testimony
23 provided by the petitioners and as well as other
24 analyses looking for impacts on groundwater resources
25 with a particular focus on stream leakage, that is, how

1 streams can leak water into the adjacent aquifers.

2 MR. FERGUSON: So can you please explain your
3 understanding of the relationship between the
4 Sacramento River and the South American Sub-basin?

5 WITNESS MEHL: Yeah. Based on the technical
6 information provided by SCWA and information contained
7 within the groundwater management plan, the Sacramento
8 River is hydraulically connected to the South American
9 Sub-basin, more specifically the central basin.

10 And the Sacramento River is a losing river.
11 In other words, water from the river leaks into the
12 aquifer, so it's a source of recharge for the aquifer.

13 MR. FERGUSON: Can you please explain your
14 understanding of SCWA's groundwater use from this
15 central basin?

16 WITNESS MEHL: Yeah. SCWA operates a number
17 of wells that are within a few miles of the planned
18 intakes. They operate a conjunctive use program, so
19 they rely on both service water and groundwater. In
20 recent years, they pumped between 20- to 30,000
21 acre-feet per year of groundwater -- depends on the
22 year type, if the it's a drier year or wetter year.

23 They have plans for build-out conditions to
24 support up to 60,000 acre-feet per year of groundwater.
25 Again, depending on the year type, groundwater can make

1 up about 60 to 65 percent of the total water supply.

2 MR. FERGUSON: Okay. Thank you.

3 So using the graphic we have here on Slide 2
4 can you explain conceptually how the hydraulic
5 relationship between the river and the basin could be
6 evaluated to assess potential impacts in the WaterFix
7 project?

8 WITNESS MEHL: Yeah. So this is a graphic
9 showing simple analytic solution that characterizes
10 sort of the fundamental behavior between streams and
11 aquifers. What you're seeing is the stream stage being
12 changed on the left-hand side; it's being reduced.

13 And what happens is that that stream stage
14 hydraulic propagates into the aquifer. So the
15 groundwater levels will respond to that change in
16 stream stage, and that will cause change in gradients,
17 changes in stream leakage as well.

18 So one thing that does occur is that
19 groundwater responds at a much slower time scale than
20 surface water hydraulics. So the groundwater response
21 will mimic more sort of the average conditions in the
22 stream rather than extremes or rapid changes. So what
23 we're talking about are potentially, you know,
24 long-term, you know, cumulative impacts from average
25 changes in stream levels.

1 There's also complex numerical models that can
2 be used to evaluate the connection between streams and
3 aquifers that account for more of the complexities of
4 the real system considering heterogeneity,
5 multidimensional flows, and things like that. Those
6 are less restrictive than the simple analytic
7 solutions. And I can discuss more of that later.

8 MR. FERGUSON: Did you evaluate the
9 petitioner's testimony for any stream leakage analyses?

10 WITNESS MEHL: Yeah, we looked at the
11 potential long-term cumulative impacts of the
12 California WaterFix on groundwater resources, again,
13 particularly paying attention to impacts at groundwater
14 levels and associated changes in stream leakage between
15 the Sacramento River and the adjacent aquifers.

16 A thorough analysis of that interaction between
17 the Sacramento River and downstream, particularly
18 downstream of the diversions, was not provided by the
19 petitioners nor in any of the environmental documents
20 that I reviewed. And that should be part of a more
21 thorough review of the potential impacts of the
22 California WaterFix.

23 MR. FERGUSON: So can you please explain more
24 specifically the sort of analyses you did find in the
25 petitioner's documentation for this proceeding?

1 WITNESS MEHL: Yeah, there was Dr. Tehrani's
2 testimony that explained some of the service hydraulic
3 responses from the diversions using the DSM2 modeling
4 results looking at the various operational scenarios
5 and comparing those to the no action alternative
6 showing that there would be changes in stream levels,
7 up to 1.2 feet at high flows and about half a foot at
8 some of the lower flows.

9 Those analyses were based on minimum
10 conditions which, you know, don't occur that frequently
11 and don't say much about what the average conditions
12 would be, which are more important for how aquifers
13 would respond.

14 And there is no -- there's no analyses
15 presented on stream-aquifer interaction in that
16 testimony.

17 The results of Mr. Munevar's testimony, that
18 was more of an overview of the CalSim approach that
19 were used for determining the water supply and what was
20 going on in the Delta, specifically looking at the
21 Alternative 4A, which is the preferred alternative.
22 Again, in that testimony, there's -- the effects of
23 groundwater and stream-aquifer interactions are not
24 presented.

25 There's also the Draft EIR/EIS in Chapter 7

1 that actually has a quite extensive analysis of impacts
2 on groundwater resources, and some modeling was done on
3 that. The overall focus of that chapter is on the
4 effects of the impacts to groundwater based on the
5 dewatering and construction operations and also seepage
6 from the forebays. And I couldn't find any specific
7 details, again, on the effects on groundwater recharge
8 and stream leakage based on changes in stream levels
9 downstream of the North Delta diversions.

10 And there was also DWR 218 and Mr. Bednarski's
11 testimony at DWR 57 that again are focused mainly on
12 the construction aspects of the tunneling and so forth
13 and in some of the mitigation strategies for
14 controlling seepage from the forebays.

15 MR. FERGUSON: All right. Can you please
16 elaborate on your experience with the numerical
17 groundwater models?

18 WITNESS MEHL: Yeah. Before joining the
19 faculty at UC Chico, I worked for the US Geological
20 Survey in the National Research Program developing
21 capabilities for MODFLOW which is a groundwater
22 simulation tool. I worked on some of the solvers, also
23 local grid refinement capabilities.

24 Currently, I've got some master students --
25 previous master students doing research using the

1 Central Valley model in the northern Sacramento Valley
2 looking at effects of water transfers on groundwater
3 supplies.

4 MR. FERGUSON: So can you please elaborate on
5 the numerical models that could be used to analyze
6 potential impacts to stream aquifer interaction?

7 WITNESS MEHL: Yeah, there's the CGB sim model
8 which is developed and maintained by the California
9 Department Water Resources. It encompasses the entire
10 Central Valley.

11 There's sort of the USGS counterpart to that,
12 the CVHM Central Valley hydrologic model, also covers
13 the same area in the Central Valley and has been used
14 to look at impacts on groundwater storage and so forth
15 in the Central Valley. There's also the Sac IGSM which
16 is built on the precursor to the same platform of the
17 CGB sim. It's more of a localized model in the
18 Sacramento area that was built for analyzing surface
19 water, groundwater problems or issues in that area.

20 And then also the CVHMD model, which was used
21 by the petitioners, which is a more refined model of
22 the CVHM model, so it's sort of cut out of that. And
23 it's a refined and more detailed representation of the
24 surface water features and the features of the Delta.

25 MR. FERGUSON: So earlier you mentioned that

1 you'd reviewed the DEIR/DEIS analysis of groundwater
2 impacts and that they used numerical modeling for those
3 analyses. In preparing your testimony for this
4 proceeding, did you review the actual models used for
5 that analysis or -- those analyses excuse me?

6 WITNESS MEHL: Yeah, I reviewed both the CVHM
7 model and the CVHMD model, and I'm generally familiar
8 are them.

9 MR. FERGUSON: Can you please describe whether
10 and how the petitioners used those tools to evaluate
11 project impacts on groundwater resources?

12 WITNESS MEHL: Yeah, the CVHM model was used
13 by the petitioners. It was modified from the USGS --
14 U.S. Geological Survey version to include some other
15 things like climate change and what have you.

16 But in that model, the North Delta diversions
17 are not represented in that, and so there's no specific
18 attention given to the stream leakage questions.

19 MR. FERGUSON: And with respect to the CVHMD
20 model?

21 WITNESS MEHL: Yeah, the CVHMD model is,
22 again, that more refined version within the Delta. And
23 this model appears to be to have been constructed for
24 analyzing impacts on the construction, dewatering, and
25 the seepage from the forebays and things like that.

1 And, again, no particular attention was given on the
2 stream leakage impacts using that model.

3 Now, it could have been used for that, but it
4 appears that the model was not built for that purpose,
5 and modifications would be necessary to use it for
6 assessing stream leakage.

7 There's also no uncertainty analysis provided
8 for any of those models, so values are given as sort of
9 a truth or absolute. But it would be good to have
10 uncertainty analysis conducted to address these
11 questions of the impacts on stream leakages.

12 MR. FERGUSON: Earlier I mentioned that we had
13 to file a correction to your testimony. So did the
14 correction to your testimony change your opinions about
15 whether leakage -- excuse me -- whether you could use
16 the CVHMD to provide reliable results concerning stream
17 leakage?

18 WITNESS MEHL: No, given the issues, I would
19 still need to take a more careful look at the CVHMD
20 model and consider certain technical refinements to get
21 a better idea of its reliability for assessing stream
22 leakage.

23 MR. FERGUSON: So could you provide me with
24 your overall conclusions from your analysis?

25 WITNESS MEHL: Yeah. Petitioners have not

1 addressed the question of the long-term impacts of the
2 California WaterFix on stream leakage along the
3 Sacramento River, downstream of the proposed intakes.
4 And there are models available to do that, but it
5 wasn't done. And after looking at them more carefully,
6 I think additional modifications would be needed to
7 those models to address the stream leakage questions.

8 MR. FERGUSON: Okay. Thank you very much.
9 That concludes my direct.

10 MR. MILLIBAND: Good afternoon, Chair Doduc,
11 Chair Marcus, Members of the Board and staff. My name
12 is Wes Milliband. We do not have a statement to offer
13 this afternoon but we do seek to elicit testimony
14 specifically from Ms. Starr and Ms. Vandeyar.

15 CO-HEARING OFFICER DODUC: Please proceed.

16 DIRECT EXAMINATION BY MR. MILLIBAND

17 MR. MILLIBAND: Good afternoon, Ms. Starr.
18 Would you please state your first and last name and
19 spell your last name for the record.

20 WITNESS STARR: Good afternoon. My name is
21 Bonny Starr, and the last name is S-T-A-R-R.

22 MR. MILLIBAND: Thank you. Is Exhibit City
23 Sac 8 a true and correct statement of your written
24 testimony?

25 WITNESS STARR: Yes, it is.

1 MR. MILLIBAND: Is Exhibit City Sac 9 an
2 accurate statement of your professional credentials and
3 experience?

4 WITNESS STARR: Yes, it is.

5 MR. MILLIBAND: Would you please provide a
6 brief description about your professional background?

7 WITNESS STARR: Certainly. I have a
8 bachelor's of science in civil engineering, I have a
9 master's in engineering. I'm a registered professional
10 civil engineer in the State of California, and I've
11 been working for over 22 years in drinking water supply
12 regarding water quality, water treatment, and source
13 water protection. And as part of that, I've worked
14 with both groundwater and surface water utilities
15 throughout the state of California.

16 MR. MILLIBAND: Were Exhibits City Sac 10,
17 25, 26, 27, 28, and 32 prepared by you or at your
18 direction?

19 WITNESS STARR: Yes, they were.

20 MR. MILLIBAND: Thank you.

21 Ms. Vandeyar, good afternoon.

22 WITNESS VANDEYAR: Good afternoon.

23 MR. MILLIBAND: Would you please state your
24 name, first and last, and spell your last name for the
25 record.

1 WITNESS VANDEYAR: Pravani Vandeyar, last name
2 spelled V-A-N-D-E-Y-A-R.

3 MR. MILLIBAND: Thank you. Is exhibit City
4 Sac 6 a true and correct statement of your written
5 testimony?

6 WITNESS VANDEYAR: Yes, it is.

7 MR. MILLIBAND: Did anyone assist you with the
8 preparation of your written testimony.

9 WITNESS VANDEYAR: Yes, it was a collaborative
10 effort between city staff and our consultant Bonny
11 Starr. We did a lot of writing together and reviewing
12 back and forth.

13 MR. MILLIBAND: Is Exhibit City Sac 7 an
14 accurate statement of your professional credentials and
15 experience?

16 WITNESS VANDEYAR: Yes, it is.

17 MR. MILLIBAND: Are Exhibits City Sac 29 and
18 30 true and correct copies of the documents each of
19 those purports to be?

20 WITNESS VANDEYAR: Yes.

21 MR. MILLIBAND: Mr. Baker, would you please
22 pull up Exhibit City Sac 10. Thank you.

23 Ms. Starr, referring to Exhibit City Sac 10,
24 would you please explain what is illustrated on this
25 exhibit?

1 WITNESS STARR: Certainly. Well, this exhibit
2 highlights my testimony regarding potential water
3 quality impacts that could be caused by the California
4 WaterFix project which would injure the City of
5 Sacramento's municipal use, primarily in terms of
6 increased source water temperatures which could result
7 in increases in treated water disinfection byproduct
8 levels and the presence of cyanobacteria, or blue-green
9 algae, in the source water.

10 So based on my understanding of the proposed
11 operation of the California WaterFix project, which is
12 most recently described in the Recirculated Draft EIR
13 Supplemental Draft EIS as Alternative 4A with
14 operational scenarios H3 to H4, it appears it will be
15 likely that there will be an increase in the frequency
16 of lower upstream reservoir storage, especially in the
17 late summer and early fall and, as projected, to result
18 in an increase in downstream source water temperatures
19 and reduced flows in the rivers.

20 The California WaterFix documents do not
21 present any analysis of temperature effects related to
22 the municipal use or an analysis of blue-green algae
23 upstream of the Delta, and yet the information shows
24 that these both have the potential to occur. And if
25 they did, they would cause an impact to the ability to

1 use the water for drinking water supply.

2 So given the critical nature of water
3 temperature in terms of as a characteristic of water
4 supply because it affects the presence and
5 concentration of the other constituents in the water as
6 well as the effectiveness of the drinking water
7 treatment processes themselves, the project documents
8 do document that they understand that upstream
9 reservoir storage affects the downstream temperature.

10 But I wanted to prepare graphics specific to
11 the City of Sacramento. So if you look at Exhibit City
12 Sac 10, on the left side are two graphs. On the top,
13 both of these represent the water temperature at the
14 City's --

15 CO-HEARING OFFICER DODUC: Hold on, Ms. Starr.

16 If I could ask Mr. Baker to focus on -- thank
17 you. And make it a little it bigger.

18 WITNESS STARR: It helps. Okay. Certainly.

19 So these graphs present the storage of the
20 reservoir and the water temperature at the city's
21 drinking water treatment plants.

22 So in the top, we have the Folsom Lake storage
23 which is on the axis on the right side, and it's
24 acre-feet. And on the left is the temperature at the
25 E.A. Fairbairn Water Treatment Plant. The temperature

1 is represented by the blue line, and the storage is
2 represented by the green line.

3 I only put Folsom Reservoir on here because it
4 is the only reservoir upstream of the City's Fairbairn
5 Water Treatment Plant.

6 On the figure on the bottom is a presentation
7 of similar concept. On the left we have the
8 temperature, and on the right we have a percent of
9 storage. So this is for the Sacramento River Water
10 Treatment Plant, and again, the blue line is the
11 temperature at the water treatment plant. This is the
12 raw water.

13 And you'll see three lines. There's a green
14 line, which is percent of Shasta. The red line
15 represents the percent capacity of Folsom. And the
16 purple line represents the percent capacity of
17 Oroville.

18 I used percent capacity on this one because
19 the storage volumes are so different at the three
20 reservoirs, it was difficult to see them. And this
21 represented them with more normalized effect.

22 So I chose to use the previous six years to
23 the project. And as it worked out, that was a good
24 representation of multiple water year types. We have
25 some below normal years, some wet years, some dry

1 years, and two critical years at the end.

2 So what this shows is that very simply you can
3 see as the storage reservoir levels decline, so the
4 temperature of the treatment plants goes up. And it
5 becomes very prominent as you go into subsequent years.
6 In 2013, '14 and '15, those drought effects really
7 become obvious.

8 And the concern is that this condition will
9 occur more frequently under operation -- proposed
10 operation of the California WaterFix project.

11 So the key impacts that are associated with
12 increases in source water temperature is that we have
13 the potential for disinfection byproduct levels to
14 increase in our treated water.

15 If you look at the right side of the exhibit,
16 there's a graph regarding chloroform potential growth
17 over time at various water temperatures. So this is
18 just a general representation to show what can happen
19 with disinfection byproduct levels over time. And the
20 reason chloroform is a simple example is that's one of
21 the prime total trihalomethanes that's developed when
22 you use chlorination. And it represents a large amount
23 of the disinfection byproduct in the City.

24 And it is a regulatory standard. And so this
25 is important to understand because it's -- you have to

1 comply to these regulatory standards. So as you can
2 see, as temperature increases on those curves, the
3 ultimate production of chloroform increases as well.

4 Another key impact associated with increases
5 in source water temperature is the potential presence
6 of blue-green algae in the source water. Generally,
7 you can see that -- it's known that 20 degrees Celsius
8 is sort of a break point. And on the left side on
9 those charts regarding temperature and storage, I
10 actually drew a line for both of those. It's a red
11 line, horizontal, that shows the 20-degree threshold.
12 And that just shows where the reservoirs went above
13 that point -- I'm sorry. It's the temperature at the
14 city's drinking water treatment plants went above that
15 point.

16 So blue-green algae are also known as
17 cyanobacteria and they have the potential to produce
18 cyanotoxins. Two cyanotoxins have US EPA health
19 advisories at this time, and four of them are under
20 consideration for primary drinking water standards.
21 These are a real threat to public health in terms of an
22 acute health impact.

23 In addition to temperature, water calm
24 stability, which is generally represented by low
25 velocities or higher residence times, they contribute

1 to the presence of blue-green algae as well in the
2 source water.

3 The modeling that was conducted for California
4 WaterFix regarding the residence times was only
5 performed in the Delta. It was not conducted in the
6 vicinity of the city's intake facilities, which are
7 located just above the formally defined Delta.

8 But those results that are from the North
9 Delta available for the modeling in the California
10 WaterFix documents do show that the North Delta has
11 significant increases in residence time and the lower
12 velocities, so it's possible though these could migrate
13 up and cause impact at the City's intake facilities.

14 In addition, the modeling presented in
15 California WaterFix documents does show that there's
16 reductions in river flows and that also could
17 contribute to that water calm stability.

18 Historically, the City of Sacramento on the
19 Lower American River and the Sacramento River has not
20 had these conditions occur that could contribute to the
21 presence of blue-green algae. The flows, with the
22 recent drought effects, though, we started to see very
23 low flows and much higher temperatures, as you is see
24 on the charts up there. So there was concern in 2015
25 that perhaps these are something that the City should

1 begin to analyze for.

2 So the City analyzed them and did not detect
3 any in 2015. But, again, the continuation of the
4 drought into 2016, the City elected to continue
5 monitoring. And unfortunately, they actually were
6 detected at both intakes to the treatment plants
7 cyanotoxins. And this is a very serious implication
8 for them.

9 So the actual data that we have shown on the
10 bottom right of the exhibit -- these are just two
11 examples of results there are more. What they show is
12 that California WaterFix identified that we don't have
13 the conditions existing at our sources to warrant
14 evaluations upstream of the Delta. But in fact the
15 real data shows that it is detected, it has been, and
16 it should have been evaluated. Thank you.

17 MR. MILLIBAND: Thank you, Ms. Starr.

18 When you refer to the City of Sacramento's
19 treatment plants, can you briefly describe your
20 understanding as to where those plants are located to
21 help supplement the statements you just provided?

22 WITNESS STARR: Certainly. The City of
23 Sacramento has two surface water treatment plants. The
24 E.A. Fairbairn Water Treatment Plant is located on the
25 Lower American River. It's actually right near the

1 Howe Avenue Bridge crossing. And the Sacramento River
2 Water Treatment Plant is located on the Sacramento
3 River just below the confluence with the American
4 River. It's actually just a few hundred feet down from
5 that confluence. It's the dragonfly intake on the
6 river there by the railroad yard.

7 MR. MILLIBAND: Based upon your professional
8 experience and the analysis you provided for these
9 proceedings, what is your opinion as to how California
10 WaterFix impacts the City of Sacramento?

11 WITNESS STARR: Yeah, my review of the data
12 and combined with my experience and professional
13 knowledge shows that there are times where operations
14 of the California WaterFix could jeopardize the City's
15 ability to use the water due to these water quality
16 implications.

17 MR. MILLIBAND: Thank you. No further
18 questions.

19 CO-HEARING OFFICER DODUC: Thank you.

20 Mr. Bezerra?

21 MR. BEZERRA: Thank you very much. Ryan
22 Bezerra, representing the same clients as this morning.
23 We will be presenting the testimony of Jeff Weaver.

24 So if we could please pull up Exhibit
25 ARWA-102.

1 Thank you.

2 DIRECT EXAMINATION BY MR. BEZERRA

3 MR. BEZERRA: Mr. Weaver, please state your
4 name for the record.

5 WITNESS WEAVER: My name is Jeffrey Weaver.

6 MR. BEZERRA: Have you taken the oath in this
7 hearing?

8 WITNESS WEAVER: Yes.

9 MR. BEZERRA: Is Exhibit ARWA-100 your
10 testimony?

11 WITNESS WEAVER: Yes, it is.

12 MR. BEZERRA: Is Exhibit ARWA- 101 a correct
13 statement of your qualifications?

14 WITNESS WEAVER: Yes.

15 MR. FERGUSON: Are Exhibits BKS-12 and BKS-13
16 referenced in your testimony?

17 WITNESS WEAVER: Yes, they are.

18 MR. BEZERRA: Did you prepare those exhibits?

19 WITNESS WEAVER: I did.

20 MR. BEZERRA: Are Exhibits ARWA-102 through
21 ARWA-106 referenced in your testimony?

22 WITNESS WEAVER: Yes, they are.

23 MR. BEZERRA: Did you prepare Exhibits
24 ARWA-102, 105, and 106?

25 WITNESS WEAVER: Yes, I did.

1 MR. BEZERRA: Is this anything about your
2 testimony that you would like to correct?

3 WITNESS WEAVER: Not that I can think of,
4 thank you.

5 MR. BEZERRA: Okay. Can we pull up Slide 2,
6 please?

7 How have you been involved in the development
8 of the CalSim 2 model?

9 WITNESS WEAVER: I've been doing modeling of
10 California water for the last 17 years. I've been
11 involved in several Cal Sim 2 projects for the
12 Department of Water Resources, Bureau of Reclamation,
13 the Corps of Engineers, and several local water
14 agencies and water districts.

15 I've specifically been involved in several
16 American River modeling projects. Under contract with
17 the Corps of Engineers, I've worked on their water
18 control manual -- excuse me, the CalSim that fed into
19 their modeling. And then I've also worked as a
20 consultant to the Water Forum and their modeling
21 representation of their flow management standard.

22 MR. BEZERRA: How specifically have you been
23 involved in CalSim II's depiction of American River
24 observations?

25 WITNESS WEAVER: As part of our contract to

1 the Corps of Engineers for the water control manual
2 update, we participate -- we, HDI, developed the
3 CalSim 2 representation of the American River that is,
4 as far as I can tell, used by the project proponents in
5 their modeling of the California WaterFix that was
6 developed through concurrence with Reclamation.

7 And then we subsequently, as part of my work
8 with Water Forum, continued to evolve that work and
9 continued to enhance and improve upon the
10 representation of operations of the Lower American
11 River.

12 MR. BEZERRA: How did you develop your
13 testimony, Exhibit ARWA-100?

14 WITNESS WEAVER: I downloaded the five
15 Cal WaterFix models from the SWRCB website. And I
16 initially reviewed the critical years that were -- and
17 reviewed Folsom Reservoir and American River operations
18 in critical years.

19 Then as part of that review, I focused on the
20 period of January 1932 through December of 1933.

21 MR. BEZERRA: Why did you focus on that
22 1932-to-1933 period?

23 WITNESS WEAVER: As we were -- or as I looked
24 at that period, it was a very interesting sequence of
25 years where we've had a below normal year that led into

1 a critical year and we went from a very full reservoir
2 to an empty reservoir. And it seemed to be -- it was
3 reminiscent of recent years.

4 MR. BEZERRA: Did you conduct any original
5 modeling in preparing your testimony?

6 WITNESS WEAVER: No, I did not.

7 MR. BEZERRA: You only reviewed the
8 petitioner's modeling, correct?

9 WITNESS WEAVER: That's correct.

10 MR. BEZERRA: Can you please explain what is
11 shown in the figures on Slide 4?

12 WITNESS WEAVER: Sure. So these two figures
13 are the bulk of my testimony, and you will see them
14 repeated over and over again.

15 What we have is, in the upper figure, it's
16 Folsom Reservoir storage under the five alternatives
17 between January 1932 and December of 1933.

18 The lower figure has American River flows
19 below Nimbus Dam for the same five alternatives for the
20 same period. In each of these figures, the no action
21 alternative is represented with a black line. The
22 Boundary 1 alternative is represented with a blue line.
23 The H3 alternative is green line, and the H4 is purple,
24 and the Boundary 2 is red.

25 MR. BEZERRA: So just to clarify, the black

1 line on these slides represents the modeling results
2 for the no action alternative, correct?

3 WITNESS WEAVER: That's correct.

4 MR. BEZERRA: And the other lines represent
5 the modeling results for the with action scenarios,
6 correct?

7 WITNESS WEAVER: That's correct.

8 MR. BEZERRA: Thank you.

9 WITNESS WEAVER: And I've also in this figure
10 added lines to show that the water year -- delineation
11 between water year 1932 and water year 1933 and
12 indicated what the Sacramento Valley index water year
13 type was for those two water years.

14 MR. BEZERRA: We're now on Slide 5. Can you
15 please explain generally what these two graphs show?

16 WITNESS WEAVER: Sure. So here, we're
17 focusing on the operations in May of 1932 through
18 August 1932. And so what we see at the end of May of
19 1932, the Folsom Reservoir, the simulated storage under
20 all alternatives is at its maximum pool.

21 And then subsequent that, in June, the H4
22 alternative simulated releases go up to 5,000 cfs. And
23 then subsequent -- and then in July of 1932, the other
24 three action alternatives releases all 5,000 cfs.

25 And we see this manifest itself in a storage

1 differential that starts in June of 1932 with the H4
2 alternative and then grows under the other three
3 alternatives -- excuse me, all four action alternatives
4 show increasing storage differential between themselves
5 and the no action alternative through July and August.

6 MR. BEZERRA: Just to clarify, so in July and
7 August of 1932, the with-action scenarios released
8 significantly more water from Folsom reservoir than the
9 no action scenario, correct?

10 WITNESS WEAVER: That is correct.

11 MR. BEZERRA: And by approximately how much
12 did the with-action scenarios draw down Folsom
13 Reservoir relative to the no action scenario?

14 WITNESS WEAVER: By the end of August 1932,
15 there was an almost 200,000 acre-foot storage
16 differential between alternatives.

17 MR. BEZERRA: How does that draw down compare
18 with the total storage capacity of Folsom Reservoir?

19 WITNESS WEAVER: The total storage capacity of
20 Folsom is nominally a million acre-feet, actually
21 slightly less than that. So that represents about a
22 20 percent additional draw down.

23 MR. BEZERRA: Thank you. We're now on
24 Slide 6. Can you please explain what Slide 6 shows?

25 WITNESS WEAVER: Sure. So in the period of

1 September 1932 through February of 1933, we see that
2 the storage differential that was -- that was created
3 by August of 1932 essentially persists through the end
4 of February of 1933. There is some difference in flows
5 between alternatives, both greater and less than the
6 flows that occurred -- the simulated flows that
7 occurred under the no-action alternative. But more or
8 less, that storage differential that was created in
9 July and August is -- persists.

10 MR. BEZERRA: And the 1933 water year began on
11 October 1st, 1933, correct?

12 WITNESS WEAVER: That is correct.

13 MR. BEZERRA: And that water year is a
14 critically dry water year in the modeling?

15 WITNESS WEAVER: That is correct.

16 MR. BEZERRA: These results, then, show that
17 the with-action scenarios have substantially less
18 Folsom Reservoir storage than the no-action scenario
19 going into the critically dry 1933, correct?

20 WITNESS WEAVER: That is correct.

21 MR. BEZERRA: Thank you.

22 We're now onto Slide 7. Can you please
23 explain what Slide 7 shows?

24 WITNESS WEAVER: Sure. In February 1933,
25 Folsom Reservoir storage is -- under the Boundary 2

1 alternative is below 200,000 acre-feet. And under the
2 other three action alternatives, the storage is below
3 300,000 acre-feet.

4 This triggers what we call an off-ramp, and
5 the flows subsequently, in March 1933, drop down to the
6 absolute regulatory minimum defined by Decision 893 in
7 the modeling under the action alternatives while the
8 flows under the no-action alternative remained at more
9 or less the level in March -- excuse me February.

10 MR. BEZERRA: And how realistic are the
11 operations of the American River that occurred in 1933
12 in petitioner's modeling in the with-project scenarios?

13 WITNESS WEAVER: We don't -- I don't believe
14 that that is a realistic operation that Reclamation
15 would reduce flows down to that level in -- under that
16 situation. We did not see that in the past several
17 years. They did not drop flows to that level in light
18 of low storage.

19 MR. BEZERRA: Moving to Slide 8, can you
20 please explain why you have reached the conclusion that
21 those operations are not realistic?

22 WITNESS WEAVER: Sure. So this is a
23 description of the off-ramp condition I previously
24 referenced. And this is contained in the 2006 flow
25 management standard. I'll be referring to it as FMS

1 later. It was incorporated into NMFS 2009 biological
2 opinion.

3 And basically, the 2006 FMS indicates that, if
4 Folsom storage is forecasted to fall below 200,000
5 acre-feet at any point within the next 12 months, then
6 the minimum release is allowed to drop to as low as 250
7 cfs between January 1st and September 15th and as low
8 as 500 cfs in September 16th through December 31st.

9 The Waterfix modeling includes what we would
10 call a step function, where, if the forecast indicates
11 storage less than 200,000 acre-feet, then it triggers a
12 drop to that minimum allowable level. And it is
13 generally applied at the -- you know, the Decision 893
14 is for flows throughout the Lower American River. It's
15 not necessarily just at the Nimbus Dam.

16 So while the modeling may indicate a release
17 of something on the order of 500 cfs, it's being
18 operated to meet nominally 250 cfs at the mouth.

19 MR. FERGUSON: Have you previously identified
20 this issue with CalSim modeling of Lower American River
21 operations?

22 WITNESS WEAVER: The Water Forum technical
23 team was reviewing this sort of operation and saw
24 behavior very identical to what is reflected in the
25 WaterFix modeling and took a -- modified the logic so

1 that, rather than dropping all the way down to the 250
2 or 500 cfs, it reduced the MRR just to a level that
3 would maintain storage at or above 200 acre-feet.

4 MR. BEZERRA: By "MRR," do you mean minimum
5 release requirement at Nimbus Dam?

6 WITNESS WEAVER: Yes, sorry. That is the
7 release from Nimbus Dam, yes.

8 MR. BEZERRA: So in your work for the Water
9 Forum, you have modified CalSim to more realistically
10 reflect how the off-ramp would work on the American
11 River?

12 WITNESS WEAVER: That is correct. We, working
13 with biologists, tried to find an operation that would
14 be a more responsible management of the water.

15 MR. BEZERRA: Moving on to Slide 9, can you
16 please explain how realistic the recovery of Folsom
17 Reservoir storage in the spring of 1933 of the
18 with-action scenarios relative to the no-action
19 scenario, how realistic is that recovery in the
20 with-action scenarios?

21 WITNESS WEAVER: Since the off-ramp seems to
22 have been unrealistically applied, that there's a
23 substantial storage reduction -- excuse me -- storage
24 recovery that occurred due to the nearly 1,000 cfs of
25 flow differential in March of 1933. That flow

1 differential contributed substantially to recovering
2 the storage under the action alternatives relative to
3 the no-action alternative.

4 MR. BEZERRA: How realistic is that recovery
5 in petitioner's with-action scenarios?

6 WITNESS WEAVER: That's not a realistic
7 operation per the previously stated problems with the
8 March 1933 operations.

9 MR. BEZERRA: Moving on to Slide 10, what
10 operations in petitioner's Cal WaterFix modeling occur
11 on the American River in June 1933?

12 WITNESS WEAVER: In the period of April
13 through May of 1933 --

14 MR. BEZERRA: I apologize.

15 WITNESS WEAVER: -- we see a gradual
16 storage -- a continued storage recovery largely driven,
17 I suspect, by balancing storage between Shasta and
18 Folsom Reservoirs.

19 MR. BEZERRA: Thank you.

20 Moving on to Slide 11, now in petitioner's Cal
21 WaterFix modeling, what operations occur on the
22 American River in June 1933?

23 WITNESS WEAVER: So what we see here is that
24 under the Boundary 1, H3 and H4 alternatives, storage
25 has recovered to approximately 20,000 acre-feet below

1 the storage from the no-action in Boundary 2 at the end
2 of May in 1933.

3 That 20,000 acre-foot difference results in an
4 off-ramp being retriggered under the Boundary 1, H3 and
5 H4 alternatives. And we see flows being subsequently
6 reduced in June of 1933.

7 The no-action alternative and Boundary 2
8 alternatives did not have that same no action -- excuse
9 me, off-ramp, and we see a substantial increase in
10 flows there and creating a storage differential that is
11 by June of 1933.

12 MR. BEZERRA: How realistic are those
13 operations in June 1933 in a critically dry year?

14 WITNESS WEAVER: It is highly unrealistic
15 that, in light of the low storage and the low snow
16 pack -- sorry. I can't say "low snow pack." I don't
17 know what the snow pack was -- but in that time of year
18 with that low of storage, that Reclamation would
19 operate Folsom Reservoir at 4,000 cfs under either the
20 no action or Boundary 2 alternatives.

21 MR. BEZERRA: Moving on to Slide 12, in
22 petitioner's California WaterFix modeling, what
23 operations on the American River are modeled to occur
24 in July and August of 1933?

25 WITNESS WEAVER: So the off-ramp was --

1 indicated for all alternatives in July of 1933. And so
2 there's a reduction in flow.

3 And then in August 1933, the model, under all
4 scenarios, releases any remaining storage above the
5 minimum pool and effectively drives the reservoir's
6 storage down to its minimum pool by the end of August
7 1933.

8 MR. BEZERRA: How realistic are those modeled
9 operations?

10 WITNESS WEAVER: I think that it's very
11 unrealistic that, in those conditions, Reclamation
12 would release between 3500 and 4,000 cfs, pushing the
13 Reservoir to minimum storage.

14 MR. BEZERRA: And by "those conditions," do
15 you mean in that period of a critically dry water year?

16 WITNESS WEAVER: That's correct, I'm sorry.

17 MR. BEZERRA: We're now on Slide 13. In
18 petitioner's California WaterFix modeling, what
19 operations on the American River are modeled to occur
20 in September of 1933 and the remainder of calendar year
21 1933?

22 WITNESS WEAVER: In September, October,
23 November, the model essentially releases all available
24 flow and holds reservoir storage at its minimum pool.
25 And then inflows pick up in December, and so storage is

1 allowed to recover somewhat.

2 MR. BEZERRA: Moving on to Slide 14, what
3 conclusions have you reached based on your review of
4 petitioner's California WaterFix modeling for 1932 and
5 1933?

6 WITNESS WEAVER: We've -- the summary is that
7 there were excessive releases in June and July of 1932
8 and under the action alternatives, created a storage
9 deficit relative to the no-action alternative that
10 persisted through the end of the below-normal year into
11 the following critically dry year.

12 There was some storage recovery that occurred
13 in March through May of 1933 due to an unrealistic
14 implementation of the off-ramp condition. And then
15 there was a subsequently large -- an unrealistically
16 large release in August 1933 that pushed storage down
17 to minimum pool. And then the minimum allow- -- then
18 there is no -- the model did not recover any storage
19 through into the fall and just kept it at minimum pool.

20 MR. BEZERRA: Thank you very much.

21 That completes our direct examination for this
22 witness.

23 CO-HEARING OFFICER DODUC: Thank you. Does
24 that conclude your direct for this entire panel?

25 MR. BEZERRA: I believe so, subject to other

1 counsel here telling me otherwise.

2 MR. FERGUSON: Yes.

3 MR. MILLIBAND: Yes, it does.

4 THE COURT: All right. Thank you.

5 Let me check in with the court reporter.

6 Are you okay if we keep going until about 3:30

7 and then we'll take another break?

8 THE REPORTER: Sure.

9 CO-HEARING OFFICER DODUC: All right.

10 With that, then, Department of Water

11 Resources, please come on up for your

12 cross-examination. During that, feel free to stand up

13 and stretch.

14 And just for everyone's information, given

15 that the Department has anticipated three hours of

16 cross-examination, we will be staying until 6:00

17 o'clock today.

18 CO-HEARING OFFICER DODUC: Mr. Berliner?

19 MR. BERLINER: Yes.

20 CO-HEARING OFFICER DODUC: All right. Please

21 proceed.

22 CROSS-EXAMINATION BY MR. BERLINER

23 MR. BERLINER: Good afternoon. My name is Tom

24 Berliner. I'm an attorney for the Department of Water

25 resources here this afternoon with Tripp Mizell and

1 Jolie-Ann Ansley, also representing the Department.

2 Mr. Mizell and I will be sharing the
3 cross-examination responsibilities.

4 Mr. Weaver, I'd like to start with you, if I
5 might.

6 Did you draft what's been marked as ARWA
7 Exhibit 100?

8 WITNESS WEAVER: Yes.

9 MR. BERLINER: And did you have any assistance
10 preparing that exhibit?

11 THE WITNESS: Mr. Bezerra assisted me.

12 MR. BERLINER: In what way did he assist you?

13 WITNESS WEAVER: He provided a template and he
14 helped me take my -- help me put it into -- my
15 statement and formatting.

16 MR. BERLINER: Did he help you with the
17 substance of your statement?

18 WITNESS WEAVER: Not that I can recall.

19 MR. BERLINER: Did anybody else assist you in
20 drafting the exhibit?

21 WITNESS WEAVER: No.

22 MR. BERLINER: Thank you. And are the
23 opinions that you've expressed today solely based on
24 the testimony contained in your Exhibit 100 as well as
25 ARWA-102?

1 MR. BEZERRA: Objection, misstates the
2 testimony. His testimony is based on his review of
3 petitioner's modeling.

4 MR. BERLINER: I'm not stating his testimony
5 I'm asking a question.

6 CO-HEARING OFFICER DODUC: What is your
7 question again?

8 MR. BERLINER: The question is whether the
9 opinions that were expressed by Mr. Weaver are based
10 solely on ARWA-100 and everything that's mentioned in
11 there and ARWA-102 and everything that's mentioned IN
12 there.

13 CO-HEARING OFFICER DODUC: Which would include
14 analysis of petitioner's modeling.

15 Please answer, Mr. Weaver.

16 WITNESS WEAVER: Yes.

17 MR. BERLINER: Thank you.

18 Based on your analysis of the WaterFix
19 modeling, I understand you reached three opinions
20 correct?

21 WITNESS WEAVER: I think that on my last slide
22 I had more than three opinions expressed. Are you
23 saying only three or at least three? I'm unclear on
24 the question.

25 MR. BERLINER: Well, I'm referring to your

1 testimony, Paragraph 34. Perhaps we could pull that
2 up.

3 And if you could go to Paragraph 34, please.

4 MS. McCUE: This is ARWA-100.

5 MR. BERLINER: So just to clarify, do I
6 understand correctly that, based on your Paragraph 34,
7 you reached three conclusions contained in Paragraphs
8 A, B, and C?

9 WITNESS WEAVER: That's correct.

10 MR. BERLINER: And are there any other
11 conclusions that you reached?

12 WITNESS WEAVER: I'm not sure. These are the
13 three which I'm testifying about. I guess -- I'm not
14 sure.

15 MR. BERLINER: Thank you. Just trying to
16 clarify. Now, do I understand that your analysis is
17 based on the years 1932 and 1933?

18 WITNESS WEAVER: Correct.

19 MR. BERLINER: And those are a two-year cycle
20 out of the entire 82-year CalSim cycle, correct?

21 WITNESS WEAVER: That is correct.

22 MR. BERLINER: And you indicated that you, in
23 your Paragraph 33, that you chose 1932 and 1933 because
24 they were particularly instructive. You used that
25 phrase, "particularly instructive." What do you mean

1 by that?

2 CO-HEARING OFFICER DODUC: Mr. Baker, could we
3 scroll up to that paragraph.

4 MR. BERLINER: It would be in the second
5 sentence of that paragraph.

6 WITNESS WEAVER: I think it's particularly
7 obstructive because, as I stated, it's a below-normal
8 year followed by a critically dry year. And we also
9 had other conditions, such as a full reservoir in a
10 below-normal year and a nominally empty reservoir in
11 the following critical year.

12 MR. BERLINER: Is there any reason that you
13 did not pick another two year sequence out of the
14 82-year CalSim history?

15 WITNESS WEAVER: This was, as best I recall,
16 the period that really had all of these elements all in
17 one piece -- one place.

18 MR. BERLINER: Did you check other two-year
19 sequences?

20 WITNESS WEAVER: I did not look at every
21 two-year sequence.

22 MR. BERLINER: Is it possible, then, that a
23 two-year sequence that you characterized as a
24 below-normal year followed by a critically dry year
25 might disclose different information than the 1932-33

1 sequence?

2 WITNESS WEAVER: It is possible.

3 MR. BERLINER: And was a key to part of your
4 analysis that it was a below-normal year followed by a
5 critically dry year?

6 WITNESS WEAVER: Yes, it is.

7 MR. BERLINER: Are you familiar with CDEC?

8 WITNESS WEAVER: Yes.

9 MR. BERLINER: What is CDEC?

10 WITNESS WEAVER: California Data Exchange
11 Commission.

12 MR. BERLINER: And what is that used for?

13 WITNESS WEAVER: It's a data repository for
14 data flow and reservoir elevation storage data.

15 MR. BERLINER: Is that a database that's
16 typically used by modelers such as yourself in order to
17 gain information about various year types and flows, et
18 cetera?

19 WITNESS WEAVER: I have used CDEC for that
20 purpose.

21 MR. BERLINER: Did you use it here?

22 WITNESS WEAVER: I did not.

23 MR. BERLINER: Could you, Mr. Baker, please
24 pull up DWR Exhibit 552.

25 Sir, does this exhibit look familiar to you as

1 a page out of CDEC?

2 WITNESS WEAVER: Yes, it does.

3 MR. BERLINER: Mr. Baker, could you scroll
4 down to 1932 and 1933. Thank you.

5 We have hard copies that we'll pass out for
6 the convenience of the witness and counsel and the
7 Board.

8 Mr. Weaver, when you were determining what
9 year types to look at, you were basing that on the
10 Sacramento River index, correct?

11 WITNESS WEAVER: That's correct.

12 MR. BERLINER: Mr. Baker, if you wouldn't mind
13 to just scroll up to the top of the document. You can
14 stop there.

15 And by the Sacramento Valley index, that would
16 be the left-hand side of the chart, and the San Joaquin
17 Valley would be the right-hand side of the chart,
18 correct?

19 WITNESS WEAVER: I believe this is
20 representative of historical Sacramento Valley indices.

21 MR. BERLINER: And, Mr. Baker, if you could
22 now scroll down. Why don't you stop right there.

23 And there is a column that has -- various
24 columns with year type and numbers. And then there's a
25 column that has initials W, BN, D. We agree that "W"

1 is wet and "BN" is below normal?

2 WITNESS WEAVER: Yes.

3 MR. BERLINER: And a "D" would be dry?

4 WITNESS WEAVER: Yes.

5 MR. BERLINER: And an "AN" would be above
6 normal, and "C" would be critically dry, correct?

7 WITNESS WEAVER: That's correct.

8 MR. BERLINER: Do you see that 1932 is
9 highlighted?

10 WITNESS WEAVER: I do.

11 MR. BERLINER: And do you see that, on CDEC,
12 1932 is labeled as a dry year?

13 MR. BEZERRA: Objection, it's irrelevant.
14 Mr. Weaver's testimony clearly states in Paragraph 14,
15 "These water years are classified according to the
16 Sacramento Valley index which was adjusted for climate
17 change and defined as an input in DWR's CalSim 2
18 modeling."

19 So his analysis is based entirely on
20 petitioner's modeling, which includes some climate
21 change and is not based on historical CDEC
22 classifications.

23 CO-HEARING OFFICER DODUC: Mr. Berliner?

24 MR. BERLINER: I think the witness is capable
25 of answering that question rather than counsel.

1 CO-HEARING OFFICER DODUC: Actually, I'm
2 curious as to where you're going with this.

3 MR. BERLINER: Well, I'm looking at CDEC. And
4 we may have a difference of opinion as to what the year
5 type is. But I wanted to establish on what basis he
6 concluded that it was a below-normal year rather than a
7 dry year.

8 CO-HEARING OFFICER DODUC: All right.

9 Go ahead and answer, Mr. Weaver.

10 WITNESS WEAVER: As I indicated in my
11 testimony, I determined the water year types based upon
12 the CalSim 2 output rather than the historical water
13 year types classifications.

14 So the implication is that, in the CalSim 2,
15 1932 is a below-normal year with the climate change
16 reflected.

17 MR. BERLINER: So in fact, then, this does not
18 reflect what the historical CDEC records indicate,
19 correct?

20 WITNESS WEAVER: That's correct.

21 MR. BERLINER: Referring to your testimony at
22 Paragraph 10, a general question for you, sir. Is it
23 common practice for a planning model approach to apply
24 a consistent set of operational rules to a range of
25 hydrologic conditions?

1 WITNESS WEAVER: Yes, it is common practice.

2 MR. BERLINER: So in other words, you don't
3 use specific rules for specific years, correct?

4 WITNESS WEAVER: I believe that you would use
5 specific rules corresponding to a year's -- individual
6 year's hydrology.

7 MR. BERLINER: Okay. As opposed to an
8 individual year, correct? In other words,
9 distinguishing between a particular year and a year
10 type, let's say a dry year or a critical year, et
11 cetera?

12 WITNESS WEAVER: Every year, the conditions
13 are determined based upon that year's -- or the
14 operational rules for that year's conditions. So
15 particularly on the American River, they're not
16 determined by water-year-type classifications. There's
17 indices that drive the minimum flow requirements rather
18 than year-type classifications.

19 MR. BERLINER: What about for the Sacramento
20 River?

21 WITNESS WEAVER: I can't claim to be an expert
22 on the Sacramento River operations.

23 MR. BERLINER: Okay. Thank you.

24 And is it typical that you would hardwire a
25 specific operation in for a specific year, or you apply

1 a more general set of rules?

2 WITNESS WEAVER: The rules are general.

3 MR. BERLINER: And isn't it correct that some
4 individual years may not exactly represent intended --
5 I should say -- strike that.

6 Isn't it true that some individual years that
7 are modeled may not exactly represent intended
8 operations for that year?

9 WITNESS WEAVER: That is correct.

10 MR. BERLINER: And if I wanted to look at --
11 at a whole at the CalSim simulation period, what kinds
12 of displays or results might I take a look at?

13 WITNESS WEAVER: You can take a look at
14 exceedance probabilities as was included in the project
15 proponent's testimony. You could look at time series.
16 And you could look at long-term averages, or you can
17 look at other statistical indicators.

18 MR. BERLINER: And in fact, you plotted
19 exceedances for Folsom storage, correct?

20 WITNESS WEAVER: I have plotted exceedances
21 for Folsom storage, yes.

22 MR. BERLINER: Would one example of that be
23 BKS-12?

24 WITNESS WEAVER: Could be familiar with that.
25 Could we pull that one up?

1 MR. BERLINER: Maybe we could pull that one
2 up, Mr. Baker.

3 It was one of the examples mentioned by your
4 counsel.

5 WITNESS WEAVER: Yes.

6 MR. BERLINER: Are you familiar with that?

7 WITNESS WEAVER: Yes.

8 MR. BERLINER: And did you prepare that?

9 WITNESS WEAVER: I did.

10 MR. BERLINER: Could we scroll to Slide 3, Mr.
11 Baker, please?

12 Are you familiar with this slide?

13 WITNESS WEAVER: Yes.

14 MR. BERLINER: And did you prepare it?

15 WITNESS WEAVER: I did.

16 MR. BERLINER: And looking at this Slide 3,
17 which is end of September Folsom Reservoir Storage,
18 isn't it true that in the driest years there's little
19 to no difference between the no-action alternative and
20 all the project alternatives?

21 MR. BEZERRA: Objection, misstates the
22 evidence. There is a disparity between no-action
23 alternative and the project alternatives in very dry
24 conditions from approximately the 96th exceedance to
25 the 95th exceedance.

1 CO-HEARING OFFICER DODUC: Mr. Berliner,
2 please reframe your question.

3 MR. BERLINER: I'd like to respond to
4 Mr. Bezerra's objection. I asked the witness a
5 question, and counsel has now testified regarding the
6 response to my question.

7 And I think it's -- if he has an objection as
8 to the form of the question, that's fine. But to
9 interpret the drawing on behalf of the witness seems
10 inappropriate. And I think the witness, since he
11 prepared the chart, is perfectly capable of answering
12 the question.

13 CO-HEARING OFFICER DODUC: What is your
14 question again?

15 MR. BERLINER: My question is isn't it true
16 that, in the driest years, there's little to no
17 difference between the no-action alternative and all
18 project alternatives?

19 CO-HEARING OFFICER DODUC: Mr. Weaver?

20 WITNESS WEAVER: At under conditions the 95th
21 percentile and drier, there is little difference in
22 storage.

23 MR. BERLINER: Thank you.

24 We discussed at the beginning of your
25 testimony the conclusions that you reached in

1 Paragraph 34.

2 Mr. Baker, if we could pull that up for
3 convenience, please.

4 Thank you.

5 Now, the first conclusion is based on year
6 1933, correct?

7 WITNESS WEAVER: Yes.

8 MR. BERLINER: And regarding the second and
9 third conclusion marked B and C, are those conclusions
10 based on your belief that the American River coding is
11 not how you would have performed it?

12 WITNESS WEAVER: That is correct.

13 MR. BERLINER: Isn't it true that the modeling
14 assumptions for the California WaterFix that were
15 presented in this proceeding have the same American
16 River rules for both the no action alternative as well
17 as the other project alternatives?

18 WITNESS WEAVER: That is correct.

19 MR. BERLINER: Again, some general questions
20 for you, sir. Would you agree that CalSim is most
21 reliable when it's used in a comparative mode?

22 WITNESS WEAVER: I think that that is
23 generally correct, assuming that the model is
24 reflecting realistic operations, generally realistic
25 operations.

1 MR. BERLINER: And would you agree that it's
2 an improper use of the model to use it in an absolute
3 mode?

4 WITNESS WEAVER: Again, I think for purposes
5 of drawing overall conclusions, I think that's
6 accurate -- with the caveat that assuming that the
7 modeling is generally realistic.

8 MR. BERLINER: Understood.

9 And isn't it true that, when using CalSim in a
10 comparative mode, you need to have all assumptions the
11 same in the no-action alternative and the alternatives
12 except for the assuming regarding the particular
13 action?

14 WITNESS WEAVER: That's correct.

15 MR. BERLINER: In your testimony, you offered
16 a potential observation on Page 10 that I wanted to ask
17 you a question about.

18 Just to refer you specifically -- there's a
19 Paragraph 32-A. And at the end of that paragraph, you
20 state that the fact that the other with-project
21 scenarios did not take advantage of the available
22 off-ramp indicates that modeling of factors outside the
23 American River Basin were causing the California
24 WaterFix modeling to maintain higher releases from
25 Folsom Reservoir during this month of the critically

1 dry 1933. Do you see that sentence?

2 WITNESS WEAVER: Yes.

3 MR. FERGUSON: What are you referring to as
4 possible factors outside the American River Basin?

5 WITNESS WEAVER: I didn't evaluate -- I didn't
6 try to determine what those were. When I reviewed the
7 modeling, I saw that, as you indicated, all the models
8 included the same project for the American River. And
9 the fact that there was a relatively small difference
10 in storage leading into this period, that the -- that
11 something, could have been the WaterFix, could have
12 been something else, was causing releases to go up
13 relative to the no-action alternative.

14 MR. BERLINER: You don't have any opinions to
15 what those other factors might have been?

16 WITNESS WEAVER: I didn't investigate that at
17 all.

18 MR. BERLINER: Okay. Thank you.

19 I have no further questions for this witness.

20 CO-HEARING OFFICER DODUC: Thank you. And I
21 forgot, and Mr. Bezerra at this time did not remind me
22 to ask you to outline your topics of cross-examination.
23 I think for each witness, as you begin your
24 cross-examination, if you would outline those topic
25 areas, it would be helpful for us to follow along.

1 So I guess Mr. Mizell are you up next? And
2 you will be cross-examining which witness? And what is
3 your topic areas?

4 MR. MIZELL: I'll be cross-examining
5 Ms. Vandeyar, talking about the temperature and
6 reservoir level correlation.

7 CO-HEARING OFFICER DODUC: All right, which
8 actually was her testimony. So go ahead.

9 CROSS-EXAMINATION BY MR. MIZELL

10 MR. MIZELL: Hello, Ms. Vandeyar.

11 WITNESS VANDEYAR: Hello.

12 MR. MIZELL: Am I saying your name correctly?

13 WITNESS VANDEYAR: That's correct.

14 MR. MIZELL: Okay. Good. Thank you.

15 Did you draft what has been marked as Exhibit
16 City Sac-6?

17 WITNESS VANDEYAR: Yes.

18 MR. MIZELL: And did anyone assist you in
19 drafting the testimony of City Sac-6?

20 WITNESS VANDEYAR: Yes, it was a collaborative
21 effort between city staff, our consultant Bonny Starr.
22 We wrote it together to ensure factual accuracy of the
23 water quality information.

24 MR. MIZELL: Other than Ms. Starr, what other
25 staff helped you prepare the testimony?

1 WITNESS VANDEYAR: Within the City? Alyssa
2 Coleman, Sheryl Hyun [phonetic]. There was some
3 discussion with our City's counsel on certain aspects
4 of it. Those are the people that I can remember off
5 the top of my head. It's a process that occurred quite
6 a while ago.

7 MR. MIZELL: Thank you. Are you offering any
8 opinions in your testimony today?

9 WITNESS VANDEYAR: Excuse me?

10 MR. MIZELL: Are you offering any opinions in
11 your testimony today?

12 WITNESS VANDEYAR: Yes.

13 MR. MIZELL: And what particularly is the
14 basis of the opinions that you've identified in your
15 testimony?

16 WITNESS VANDEYAR: A couple things. One is
17 based on the analysis that the City's expert with us
18 here today, Bonny Starr, has indicated through her
19 analysis, and then based on my experience with water
20 quality and the City's treatment processes utilizing
21 that information from her analysis.

22 MR. MIZELL: Is it correct to state that you
23 were not designated as an expert for purposes of this
24 proceeding?

25 WITNESS VANDEYAR: That's correct. Bonny

1 Starr is the City's designated expert.

2 MR. MIZELL: The Department would initially
3 move to strike Paragraphs 8, 10, 11, 13, 15, 17, 19,
4 and 21 through 35 as improper expert testimony beyond
5 the scope of a lay person.

6 CO-HEARING OFFICER DODUC: Mr. Milliband?

7 MR. MILLIBAND: Thank you, Chair Doduc.

8 I would initially respond that the purpose of
9 the testimony doesn't necessary require quote/unquote
10 designated expert testimony but instead looking to the
11 witness's credentials and her experience as reflected
12 in the City's exhibit, which is specifically Exhibit
13 No. City Sac-7.

14 This witness has 20 years of experience with
15 the bachelor's and a master's in chemistry and has
16 clearly stated that her personal evaluations and
17 analysis were done based upon her professional
18 experience, and Ms. Starr assists with that.

19 So she's utilizing her independent
20 professional experience and training to reach these
21 conclusions.

22 CO-HEARING OFFICER DODUC: Thank you. We'll
23 take that under consideration for now.

24 MR. MILLIBAND: And Chair Doduc, if I may,
25 since Mr. Mizell had identified what I've taken down as

1 approximately 20 paragraphs of the testimony, I'd like
2 to reserve the opportunity, if the City feels the need,
3 to submit some supplemental response to address the
4 motion to strike.

5 CO-HEARING OFFICER DODUC: All right.

6 MR. MILLIBAND: Thank you.

7 MR. MIZELL: If we're ready.

8 Would it be then fair to say that your
9 conclusions and your testimony are based primarily upon
10 the work of Bonny Starr?

11 WITNESS VANDEYAR: It's a combination of
12 Bonny's work and my experience.

13 MR. MIZELL: Okay. I can take an example
14 really quick. Could we bring up City Sac 6, looking at
15 Page 4, Paragraph 9.

16 So looking at Paragraph 9, is this -- is this
17 paragraph based upon any work other than that of Bonny
18 Starr?

19 MR. MILLIBAND: Objection to the extent asked
20 and answered.

21 CO-HEARING OFFICER DODUC: Mr. Mizell, she has
22 answered that her testimony is based on Ms. Starr's
23 work as well as her own experience. What additional
24 information are you seeking from her?

25 MR. MIZELL: With regard to this particular

1 conclusion, she doesn't cite her own experience. So
2 I'm just trying to get clarity as to which portions of
3 her testimony she relied more heavily upon Ms. Starr
4 and which she relied upon her own work.

5 CO-HEARING OFFICER DODUC: All right. Please
6 answer.

7 WITNESS VANDEYAR: So what I relied on
8 Ms. Starr for was information in terms of the reservoir
9 operations -- that's not what my expertise is in -- and
10 the modeling that she evaluated.

11 But in terms of the water temperature and its
12 impact on DBP formation as well as algal growth, that
13 would be based on my experience as well.

14 MR. MIZELL: So to be clear the two key
15 potential water quality impacts are based upon both
16 your experience and Ms. Starr's work.

17 WITNESS VANDEYAR: That's correct.

18 MR. MIZELL: Thank you.

19 If you'll go to Page 7, Paragraphs 15 and 16.

20 Is Paragraph 15, did you draft Paragraph 15
21 relying upon both Ms. Starr's work and your own?

22 WITNESS VANDEYAR: That's correct.

23 MR. MIZELL: And with regards to Paragraph 16?

24 WITNESS VANDEYAR: That would be mostly based
25 on Ms. Starr's analysis of the WaterFix.

1 MR. MIZELL: Okay. Thank you. I'll move on
2 to another topic at this point.

3 CO-HEARING OFFICER DODUC: I'm sorry. Are you
4 moving off this witness?

5 MR. MIZELL: No, just moving off of the points
6 that I've just been making on what testimony she's
7 relied upon.

8 CO-HEARING OFFICER DODUC: Before you do that,
9 though, I just pulled up the Department's objections to
10 testimony and exhibits submitted by the City of
11 Sacramento. Could you direct me to where in that
12 document you make an objection with respect to striking
13 Paragraphs 8, 10, 11, 13, 15, 17, 19 and 21 through 25?

14 MR. MIZELL: I don't believe we addressed it
15 at the time we filed our objections. It was my
16 understanding that the initial round of objections and
17 the due date was primarily focused upon evidence that
18 we were moving to strike based upon it being outside
19 the scope of the hearing or more properly addressed in
20 Part 2.

21 These motions to strike are based upon
22 Evidence Rule 800 and 801 and are more specific to the
23 details of the testimony. It was not my understanding
24 that that form of objection was due back at the former
25 due date.

1 CO-HEARING OFFICER DODUC: The purpose of the
2 deadline for submitting objections based on
3 admissibility was so that all the parties would have
4 advance knowledge of which witnesses to present and,
5 obviously, other parties which witnesses to conduct
6 cross-examination on.

7 So in that aspect, Mr. Mizell, I will have to
8 correct you in that that was the intent and that was
9 the focus on objections with respect to admissibility.

10 So for that purpose I will go ahead and
11 overrule your objection. That was just made with
12 respect to this witness.

13 MR. MILLIBAND: Chair Doduc, if I may just
14 request clarification for record purposes, is that
15 overruling specifically the motion to strike those
16 paragraphs?

17 CO-HEARING OFFICER DODUC: That is correct.

18 MR. MILLIBAND: Thank you for the
19 clarification.

20 CO-HEARING OFFICER DODUC: Now you may proceed
21 on your next line of questioning, Mr. Mizell.

22 MR. MIZELL: Thank you.

23 CO-HEARING OFFICER DODUC: And please note
24 again that my ruling will remain consistent with
25 respect to surprise objections and motions to exclude

1 based on admissibility. That should have been done by
2 the September deadline that we imposed.

3 MR. MIZELL: Okay. Thank you very much.

4 Ms. Vandeyar, in general does a correlation
5 lead you to causation?

6 WITNESS VANDEYAR: Not in general. It would
7 depend on the circumstance.

8 MR. MIZELL: And what particularly about the
9 circumstance would lead a correlation to equate to a
10 causation?

11 MR. MILLIBAND: Objection, it's just vague, at
12 least to me. If we could just request some
13 clarification or rephrasing by Mr. Mizell.

14 CO-HEARING OFFICER DODUC: Mr. Mizell, respond
15 or reframe.

16 MR. MIZELL: Certainly.

17 The witness responded that generally, but in
18 certain circumstances, they would be equivalent. And
19 I'm trying to determine from her perspective what those
20 circumstances would be.

21 CO-HEARING OFFICER DODUC: All right. Please
22 answer.

23 WITNESS VANDEYAR: It's difficult to answer
24 the question because it is so generalized. And from
25 the scientific perspective, it's easier if you have

1 information so that I can answer that.

2 But I'm assuming we're talking about the
3 correlation between increased temperatures and the
4 growth of algal toxins -- of algae in the rivers as
5 well as DBP formation. And that correlation has been
6 established by scientific research by a number of
7 different entities. So there is a correlation between
8 those in this instance or these two instances.

9 MR. MIZELL: If I may have just a second.

10 CO-HEARING OFFICER DODUC: Actually, this is
11 now a good time for a break anyway. Unless --

12 MR. BERLINER: That's fine.

13 CO-HEARING OFFICER DODUC: That's fine? All
14 right. Let's go ahead and take our afternoon break and
15 we will resume at 3:45 based on that clock.

16 (Recess taken)

17 CO-HEARING OFFICER DODUC: All right. It's
18 time is 3:45. We are back in session.

19 Mr. Mizell, please continue with your
20 cross-examination -- oh, not yet.

21 MS. AKROYD: Thank you. Rebecca Akroyd for
22 the San Luis and Delta-Mendota Water Authority.

23 Because it relates to Mr. Mizell's objections
24 that were previously discussed, I wanted to note to the
25 Hearing Officers that the San Luis and Delta-Mendota

1 Water Authority does have pending written objections
2 regarding testimony of Ms. Vandeyar on essentially the
3 same grounds as inadmissible lay opinion testimony. So
4 I wanted to renew our written objection on that point.
5 Thank you.

6 CO-HEARING OFFICER DODUC: Have you already
7 submitted those written objections?

8 MS. AKROYD: Yes, in September.

9 CO-HEARING OFFICER DODUC: Thank you. Then we
10 will get to that when we get to that.

11 MS. AKROYD: Thank you.

12 CO-HEARING OFFICER DODUC: I am ruling against
13 surprise objections of admissibility, not those that
14 have already been submitted.

15 Mr. Mizell, are you going on to your next
16 witness, or --

17 MR. MIZELL: No, just a couple of follow-up
18 questions for Ms. Vandeyar.

19 So prior to the break, Ms. Vandeyar, you
20 indicated that there was some research out there that
21 gave you confidence in the correlation between
22 temperatures and algae growth; is that correct?

23 WITNESS VANDEYAR: That's correct.

24 MR. MIZELL: Is that research indicative of a
25 causation between temperatures being a factor in algae

1 growth?

2 WITNESS VANDEYAR: Yes.

3 CO-HEARING OFFICER DODUC: Mr. Mizell,
4 actually, I'm going to ask you to move away from your
5 microphone a little bit. I was almost having
6 difficulty hearing because it was too loud.

7 MR. MIZELL: Is this better?

8 CO-HEARING OFFICER DODUC: We'll see.

9 MR. MIZELL: Okay.

10 What other factors does the research indicate
11 are contributors towards algae growth?

12 WITNESS VANDEYAR: There's nutrients, there's
13 water levels, flow rates.

14 MR. MIZELL: Is that the extent of what you're
15 familiar with?

16 WITNESS VANDEYAR: Yes.

17 MR. MIZELL: Thank you. Okay. If I could
18 have Jason pull up DWR-563 please.

19 This is an excerpt out of the Recirculated
20 Draft EIR. If we could go to the next page. There's
21 some highlighted text that makes a statement out of the
22 OCAP BiOps,

23 WITNESS VANDEYAR: I can't state specifically
24 that I am.

25 MR. MIZELL: We have copies if counsel and the

1 witnesses would like.

2 Have you had a chance to read that?

3 WITNESS VANDEYAR: The highlighted portion.

4 MR. MIZELL: Based on your understanding of
5 the highlighted portion, does the OCAP BiOp indicate
6 that reservoir levels might not be a cause of increased
7 water temperatures?

8 MR. MILLIBAND: I would just like to insert an
9 objection as to relevance and particularly given the
10 witness's testimony that she's not particularly
11 familiar with the OCAP BiOp yet is being asked to offer
12 opinions or conclusions related to this one highlighted
13 text.

14 CO-HEARING OFFICER DODUC: The witness may
15 answer to the best of her ability.

16 WITNESS VANDEYAR: And this is where we rely
17 on our consultant Bonny Starr for her expertise on this
18 type of question.

19 A very cursory look at this seems to indicate
20 that this is in the Delta and does not offer any
21 information upstream of that. But, again, I would
22 refer that to Bonny Starr.

23 MR. MIZELL: Okay. Thank you very much. And
24 I don't have any further questions at this time. I'll
25 reserve them for Ms. Starr.

1 CO-HEARING OFFICER DODUC: Okay.

2 MR. MIZELL: So my next line of questioning
3 will be for Ms. Starr, and I intend to cover two large
4 points which are the bases of her comparisons made in
5 her testimony and again discussing algae.

6 MR. MIZELL: Hello, Ms. Starr.

7 WITNESS STARR: Hello.

8 MR. MIZELL: So did you draft what has been
9 marked as Exhibit City Sac-8?

10 WITNESS STARR: Yes, I did.

11 MR. MIZELL: Did anyone assist you in drafting
12 the testimony City Sac-8?

13 WITNESS STARR: In drafting it? No, I wrote
14 the document. But I did consult with City staff
15 consultants in terms of the analysis that I conducted
16 in the preparation of writing that testimony.

17 MR. MIZELL: Do you recall which City staff
18 you consulted with prior to writing your testimony?

19 WITNESS STARR: Yeah, I do. I worked with
20 Pravani Vandeyar and Alyssa Coleman at the City of
21 Sacramento as well as got some information from Jim
22 Pfeiffer and also Beth Heuer [phonetic]. And I got --
23 there was one additional operations person, I can't
24 think of their name right now, who assisted with some
25 of the information on the effects related to operations

1 and maintenance due to impacts of the intakes and such.

2 MR. MIZELL: In order form your opinions, you
3 only looked at the modeling for the BDCP and the
4 partially recirculated EIR and EIS, correct?

5 WITNESS STARR: That's all I looked at.

6 MR. MIZELL: Just to be clear, in forming your
7 opinions, you did not review or rely upon the modeling
8 provided in this proceeding as of May 2016, correct?

9 WITNESS STARR: I'm sorry. Can you clarify
10 the question? The modeling provided by who?

11 MR. MIZELL: By the petitioners, the
12 Department and the U.S. Bureau of Reclamation.

13 WITNESS STARR: I reviewed the Draft EIR/EIS,
14 the BDCP document, as well as the Recirculated Draft,
15 various sections. The -- I guess it would be the
16 output of the model, I didn't -- I'm not a modeler. I
17 didn't take the model results and do anything with
18 those.

19 MR. MIZELL: So the modeling that was provided
20 on the FTP site for the exhibits for this?

21 WITNESS STARR: Yeah, I did not download or
22 manipulate that. I don't have the tools to do that.

23 MR. MIZELL: Thank you.

24 In your testimony on Paragraph 35 --

25 And if we want to bring that up...

1 MR. BAKER: For clarification, right now on
2 the screen is City Sac-8. Is that the exhibit you wish
3 to be displayed?

4 MR. MIZELL: Yes, please.

5 So in Paragraph 35 the impacts on the American
6 River show higher winter flows based on Figure C-19-1,
7 correct?

8 WITNESS STARR: That's what it says.

9 MR. MIZELL: In order to make the conclusion
10 that you have made in Paragraph 35, you're comparing
11 the existing conditions with Alternative 4 H4
12 operations, correct?

13 WITNESS STARR: Yes, I did.

14 MR. MIZELL. Jason, if we could bring up
15 DWR-553, please.

16 We have paper copies as well.

17 So looking at the upper right graph, this is
18 the graph that represents Alternative 4 H4?

19 WITNESS STARR: Yes, for the late long-term.

20 MR. MIZELL: Is it true this graph indicates
21 that all the alternatives, including the no-action
22 alternative, overlap one another?

23 WITNESS STARR: It appears that way in the --
24 if you're speaking about the January-to-March
25 timeframe.

1 MR. MIZELL: And the remainder of the year,
2 they're very similar?

3 WITNESS STARR: They're similar, yes.

4 MR. MIZELL: Would you say there's no
5 significant change between the alternatives and the
6 no-action alternative?

7 WITNESS STARR: I don't think that I'm
8 qualified to qualify the significance of the model
9 output.

10 MR. MIZELL: So when you note a difference
11 between Alternative 4 H4 and existing conditions,
12 you're not making an analysis of the modeling output?

13 MR. MILLIBAND: Objection, misstates the
14 testimony. There's a distinction between the
15 significance or lack thereof in differences versus what
16 Ms. Starr has stated in Paragraph 35 of her written
17 testimony, City Sac-8.

18 CO-HEARING OFFICER DODUC: I don't -- sorry.
19 Repeat that objection for me.

20 MR. MILLIBAND: Simply stated, it misstates
21 the testimony.

22 THE COURT: What was your question, again,
23 Mr. Mizell?

24 MR. MIZELL: My question was regarding the
25 witness's claim that she would not be able to describe

1 the difference between the no-action alternative and
2 Alternative 4 H4 as being similar when previously she
3 indicated that Alternative 4 H4 and existing conditions
4 are different.

5 CO-HEARING OFFICER DODUC: Please answer.

6 WITNESS STARR: Can you repeat your last
7 question?

8 MR. MIZELL: Certainly.

9 Would we be able to read that question back?

10 (Record read)

11 WITNESS STARR: I guess you would have to
12 determine what you mean by "analysis." I would say
13 looking at the graph and saying that it's below the
14 line or above the line, I don't really look at that as
15 an analysis. That's just an identification. It's
16 higher or lower. I don't mean to interpret the
17 significance of how much higher or lower it is.

18 MR. MIZELL: Thank you. I'll move on from
19 that.

20 Doesn't this graph and your conclusions
21 actually show that the impacts you're identifying are
22 due to the late long-term climate change?

23 WITNESS STARR: I'm not sure that -- again,
24 the projections that DWR and modelers made to include
25 climate change are in there. And it's -- I'm unable to

1 discern those from the model results because they
2 didn't do any of the alternatives without the climate
3 change.

4 So I can only compare the existing condition
5 to the modeling that you did including the climate
6 change. So I can't include what the late-term -- I
7 know there are other factors other than climate change
8 in there, so.

9 MR. MIZELL: And would the other factors that
10 are included in the exist- -- or strike that.

11 Are the other factors that are different
12 between the existing conditions and the alternatives
13 shown in this graph include sea level rise?

14 WITNESS STARR: I believe sea level rise is
15 one of the climate change conditions.

16 MR. MIZELL: Is it your understanding that the
17 late long-term climate change assumptions included in
18 the alternatives in this graph are climate change
19 impacts through the year 2060 and include a
20 45-centimeter sea level rise?

21 WITNESS STARR: I remembered the 45-centimeter
22 sea level rise. And I thought that the period -- I
23 know that the early long-term is 2025. And I thought
24 the late long-term is 35 years longer, so that make
25 sense for 2060. But I don't have those numbers, you

1 know, perfected.

2 MR. MIZELL: Is it your understanding that all
3 of the alternatives besides the existing conditions
4 also include 65,000 acres of habitat restoration or
5 conservation?

6 WITNESS STARR: From my understanding, all the
7 other conservation measures, the CMs, from the original
8 BDCP were included in the modeling. So I don't think
9 that any of those were removed from these results.

10 MR. MIZELL: Back to Paragraph 35 of your
11 testimony.

12 Are the impacts that you allege only in
13 reference to Alternative 4 H4?

14 WITNESS STARR: Given the fact that the
15 petition itself said that Alternative 4 H4 was the
16 proposed alternative -- some were 4 H3 to H4 -- I
17 focused my testimony on that. So, yes, that's what
18 this is only regarding that, as a witness regarding
19 that alternative.

20 MR. MIZELL: Scrolling to Paragraph 36, isn't
21 it true that, similar to Paragraph 35, this statement
22 is also only comparing -- making -- this paragraph is
23 only making a statement with regard to
24 Alternative 4 H4?

25 WITNESS STARR: Yes. Again, I only present

1 testimony on 4 H4 because at the time I prepared the
2 testimony, that's what we understood the alternative,
3 the preferred alternative to be.

4 MR. MIZELL: If we could go to Paragraph 31,
5 please.

6 CO-HEARING OFFICER DODUC: You're not going to
7 ask the same question again, are you, Mr. Mizell?

8 MR. MIZELL: Well, I do have very, very,
9 similar questions for a number of the graphs and
10 comparisons made in this testimony.

11 CO-HEARING OFFICER DODUC: Can we just cut to
12 the chase and ask her if she considered all other
13 alternatives besides 4 H4? I think she's already
14 testified that that's what she focused on.

15 MR. MIZELL: I will try and make this very
16 efficient then.

17 WITNESS STARR: Thank you.

18 MR. MIZELL: Let's see if I can phrase it to
19 avoid an objection.

20 CO-HEARING OFFICER DODUC: Or the Hearing
21 Officer's ire.

22 MR. MIZELL: Yes.

23 So, in fact, isn't it true that all of the
24 comparisons that are drawn between existing conditions
25 and -- all the comparisons drawn in your testimony are

1 between the existing conditions without climate change
2 and a project with the climate change? And I'm
3 specifically referring to your use of figures C-2-1,
4 C-2-2, C-3-1, C-3-2. I mean, for the record, I might
5 want to read the entire list, but it would basically be
6 every figure or table referenced in your testimony.

7 WITNESS STARR: Yes.

8 CO-HEARING OFFICER DODUC: Thank you for
9 short-cutting that.

10 MR. MIZELL: If I might have just a second to
11 catch up to where I might otherwise have landed.

12 For a different point, can we bring up
13 Paragraph 51, please.

14 In this paragraph, you refer to Figure
15 4.3.1-6; is that correct?

16 WITNESS STARR: Yes.

17 MR. MIZELL: If we could bring up DWR-559,
18 please.

19 Isn't it true that this particular graph
20 refers to the early long-term?

21 WITNESS STARR: Yes, it does.

22 MR. MIZELL: And the early long-term only
23 includes 20,000 acres of habitat?

24 WITNESS STARR: I'm not familiar with that
25 number.

1 MR. MIZELL: But as stated on the chart, it
2 only goes to 2025 for climate change assumptions?

3 WITNESS STARR: That's what the chart says.

4 MR. MIZELL: I'm going to shift gears here and
5 focus more on the Sacramento River Water Treatment
6 Plant.

7 During the summer months at your Sacramento
8 River Water Treatment Plant, do you know the percentage
9 of flow coming from the American River relative to the
10 flow of the Sacramento River?

11 WITNESS STARR: I do not operate the
12 Sacramento River Water Treatment Plant. I'm a
13 consultant to the City of Sacramento, so I have some
14 general knowledge that the flows vary depending on the
15 releases from the upstream reservoirs and the flows in
16 the Lower American River and the Sacramento River. It
17 is variable.

18 MR. MIZELL: For the Panel more broadly, is
19 there anybody who can familiarize us with the
20 percentage of the American River flow versus Sacramento
21 River flow at the Sacramento River Water Treatment
22 Plant?

23 WITNESS VANDEYAR: I can help answer that
24 question. What Bonny says is true. Literally, from
25 day to day, the percentages that are contributed from

1 the American River and the Sacramento River can vary.
2 You can get percentages all the way from 30-odd percent
3 up to 90, 95 percent of Sacramento River water
4 contribution or American River water contribution.

5 It does depend on the reservoir operations, so
6 the reflection of which river is contributing at any
7 particular time would have to be measured.

8 MR. MIZELL: Thank you.

9 Can you tell me how many river miles from
10 Folsom Reservoir there are to the Sacramento River
11 Water Treatment Plant?

12 WITNESS STARR: Well, I believe the Lower
13 American River up to Nimbus is roughly 22 miles. I
14 could be wrong, but that's sort of close. And then
15 there's a few more miles from Nimbus to Folsom, and the
16 Sacramento River Water Treatment Plant is maybe 1,000
17 feet downstream of the confluence, so maybe a quarter
18 of a mile beyond that.

19 MR. MIZELL: All told, what would you estimate
20 that to be?

21 WITNESS STARR: 25 miles, roughly.

22 MR. MIZELL: Similar question, do you know how
23 many river miles there are between Shasta Reservoir and
24 the Sacramento River Water Treatment Plant?

25 WITNESS STARR: Roughly, probably closer to

1 200. I'm not sure, though; that's a guess.

2 I know that the city's intake is at Sacramento
3 River Mile -- I believe it's 61.5, roughly. So, like,
4 the Feather River confluence is roughly 70 river miles.
5 So that's 9 miles right there. So it's probably less
6 than 200 miles, maybe a hundred something.

7 MR. MIZELL: Again, a similar question,
8 approximation of the river miles between Oroville and
9 the Sacramento River Water Treatment Plant?

10 WITNESS STARR: It would be somewhere in
11 between, somewhere between the distance to Folsom and
12 the distance to Shasta.

13 MR. MIZELL: Somewhere between 225?

14 WITNESS STARR: Mm-hmm.

15 MR. MIZELL: Are you familiar with the
16 distance between Freeport and the Sacramento River
17 Water Treatment Plant?

18 WITNESS STARR: Yes.

19 MR. MIZELL: How many miles is that?

20 WITNESS STARR: That's -- I believe Freeport
21 is River Mile 75, so roughly 15 miles.

22 These are just my best estimations, so I hope
23 I'm answering them well enough.

24 MR. MIZELL: Yes, thank you very much. I
25 appreciate the fact it's difficult to nail a specific

1 mileage between all of these parts that are so far
2 apart.

3 I'm going to ask you, I think, a short
4 hypothetical here. Assuming 5 percent or less changes
5 in flow in the river, isn't it true that the
6 atmospheric temperature is the biggest driver of water
7 temperature considering the distance from Shasta and
8 Oroville to the Sacramento River Water Treatment Plant?

9 MR. MILLIBAND: Objection, to the extent it's
10 an incomplete hypothetical and calls for speculation.

11 CO-HEARING OFFICER DODUC: She's an expert
12 witness. She may answer to the best of her ability,
13 and if she cannot, she may state so.

14 WITNESS STARR: I'm a little confused as to
15 where you're asking for the temperatures. Are you
16 suspecting that's occurring at the Sacramento River
17 Water Treatment Plant? Is that where you're leading
18 this? The temperature change is there? I'm confused
19 with your question.

20 MR. MIZELL: Yes. Yes. This would be -- I'll
21 rephrase.

22 Assuming that there is a 5 percent or less
23 change in river flows, isn't it true that the
24 atmospheric temperature at the Sacramento River Water
25 Treatment Plant -- that the water temperature at the

1 Sacramento River Water Treatment Plant is controlled by
2 atmospheric temperatures primarily?

3 WITNESS STARR: I don't think so. I mean, my
4 opinion would be it's not likely that it controls the
5 temperature. Well, with it being only 25 miles away
6 from Folsom, that temperature does certainly -- if the
7 Lower American River is running high, for instance, it
8 would have a very controlling effect. And that water
9 tends to be quite cool.

10 It would depend on the time of the year. In
11 the wintertime, it would remain cold, and in the
12 summertime, it would warm up more.

13 But I don't think that it's fair to make a
14 general characterization like that because I understand
15 atmospheric temperature has the potential to warm the
16 water in the rivers as it come down, but there's a lot
17 of other factors that would affect that as well. the
18 cold water pool and the temperature of the released
19 water would certainly affect that.

20 MR. MIZELL: I'd like to bring back up
21 DWR-563, please, again to the second page.

22 This goes that same highlighted paragraph that
23 we distributed earlier.

24 Isn't it true that the OCAP BiOp states that
25 the state and federal water projects have little, if

1 any, ability to affect the water temperatures in the
2 Delta as they are largely driven by air temperature,
3 and water temperatures at Freeport can be cooled by up
4 to about three degrees centigrade by the high
5 Sacramento River flows, but only by very high river
6 flows; it cannot be sustained by the projects.

7 WITNESS STARR: So I'm not familiar with the
8 biological opinion. I'm not a fisheries biologist, so
9 I can't comment as to the context around this
10 determination.

11 But, again, this is focused on the Delta, and
12 the Delta is a shallow water area that is very
13 different than the Sacramento and American rivers as
14 they run. And the Delta water quality is very
15 different than the upstream water quality.

16 MR. MIZELL: So is it your assertion that
17 Freeport is different than the area where the
18 Sacramento River Water Treatment Plant is?

19 WITNESS STARR: That is not my assertion, no.
20 It can be. Again, the water quality between Freeport
21 and the Sacramento River Water Treatment Plant at times
22 can have great consistency in quality and at times can
23 have great inconsistency in quality. It's pretty
24 complex.

25 MR. MIZELL: All right. I'd like to move on.

1 Can we bring up DWR-557, please. We have
2 paper copies we'll be distributing.

3 I'd like to focus your attention on the first
4 grouping entitled "North Delta," specifically the
5 column listed under "Alt 4 SCN H3" as well as the
6 column "No Act."

7 Is it your understanding that this table
8 represents average residence times for sub regions of
9 the plan area by season and alternative?

10 WITNESS STARR: Yes, that's my understanding.

11 MR. MIZELL: And in the North Delta region, is
12 the increase in residence time from the no action to
13 Alternative 4 H3 the difference between 50 and 57 days?

14 WITNESS STARR: That is what is shown.

15 MR. MILLIBAND: Madam Chair, I'd just like to
16 insert an objection to assist with efficiency as to
17 relevance, given the witness's testimony that just took
18 place a moment ago with the Sacramento River and the
19 American River having very different conditions that
20 makes a comparison to Delta and Delta sub-regions, not
21 really, in my opinion, bearing a high relevance.

22 CO-HEARING OFFICER DODUC: Mr. Mizell.

23 ?

24 MR. MIZELL: This expert's testified to her
25 understanding of what drives microcystis blooms and the

1 injury that those algae blooms may cause. I'm asking
2 questions that delve into the causal factors for algae
3 blooms, and I believe it's relevant regardless of the
4 geography. The factors are generalized, and I'd like
5 to explore those.

6 CO-HEARING OFFICER DODUC: Thank you. I will
7 allow that.

8 MR. MIZELL: So again, looking at the no
9 action and the Alt 4 H3 columns, for the summer, we're
10 looking at a difference of one day?

11 WITNESS STARR: I was looking at the fall,
12 which is a difference of seven days.

13 MR. MIZELL: Correct. And in the summer, it's
14 one day?

15 WITNESS STARR: Yes. But, again, that's the
16 no-action alternative, and I focused my testimony on
17 comparison to existing conditions which would be
18 difference of six days.

19 MR. MIZELL: Isn't it true that, under the
20 modeling in the Recirculated EIR/EIS, that it found
21 that increases in microcystis were not likely relative
22 to the no-action alternative?

23 WITNESS STARR: I didn't, again, look at the
24 comparison to the no-action alternative. So that might
25 be in the document, but -- and again, that would

1 probably be for the Delta, is my assumption because
2 there was no analysis done upstream of the Delta.

3 MR. MIZELL: In your review of the draft -- in
4 your review of the Recirculated EIR/EIS, isn't it true
5 that that document states that microcystis colonies are
6 rarely, if ever, observed at the main stem of the
7 Sacramento River?

8 WITNESS STARR: What -- where are you
9 referring to?

10 MR. MIZELL: If we can bring up DWR-558, that
11 might help us out.

12 CO-HEARING OFFICER DODUC: Are you familiar
13 with this document?

14 WITNESS STARR: I don't think so. Was this an
15 appendix to the Recirculated Draft? I don't recognize
16 it.

17 MR. MIZELL: Yes, this document is referred to
18 in the Recirculated Draft EIR/EIS.

19 WITNESS STARR: It's a reference? It's not
20 actually an appendix?

21 MR. MIZELL: I'm tracking an actual citation.
22 Just give me a sec.

23 CO-HEARING OFFICER DODUC: Mr. Mizell, did you
24 have a question with respect to this document?

25 MR. MIZELL: The question that I left pending

1 was asking for a confirmation that -- whether or not
2 it's true that microcystis colonies are rarely observed
3 at the main stem of the Sacramento River.

4 CO-HEARING OFFICER DODUC: Can you point to
5 where in this document that finding is located?

6 MR. MIZELL: If we could go to the last page,
7 please, Page 36, top paragraph. This is the third
8 sentence, the one that starts with "Moving west from
9 Antioch..."

10 CO-HEARING OFFICER DODUC: Ms. Starr, are you
11 familiar with the study cited? Do you have any opinion
12 on this statement?

13 WITNESS STARR: Well, what I can tell you is
14 I'm not familiar with this study. I did not review it
15 specifically. I don't know the date it was published,
16 and I don't know the data that was fed into it.

17 But by reading this statement, they make a
18 determination of the Sacramento River at Collinsville,
19 which is not at the City of Sacramento's Sacramento
20 River water intake, which is where we have,
21 unfortunately, real positive detections of cyanotoxins
22 in 2016. So whether they didn't find them in
23 Collinsville isn't really relevant to us at this point.
24 What's relevant is that we have found them at our
25 intake.

1 MR. MIZELL: If could I bring up Ms. Starr's
2 testimony, Page 18, looking he at the footnotes.
3 Footnote 31, isn't it true that Footnote 31 references
4 the very report we were just looking at on the screen?

5 WITNESS STARR: Yeah, actually, now that you
6 pointed it out, I do have memory of it. The cover
7 looked familiar, but...

8 MR. MILLIBAND: I would just like to note the
9 witness's memory has been refreshed.

10 WITNESS STARR: Yes.

11 CO-HEARING OFFICER DODUC: So noted.

12 WITNESS STARR: I think of that as a Central
13 Valley Regional Board product. I didn't recognize the
14 SCC WRP logo that was on the front of it.

15 MR. MIZELL: I can appreciate that. I get
16 confused with scientific report names all the time.

17 If we could go back to DWR-558. So in that
18 top paragraph, third sentence, or last sentence of the
19 top paragraph, where it talks about the decline to
20 almost zero by Collinsville, do you see that sentence?

21 WITNESS STARR: Yes.

22 MR. MIZELL: Isn't it true that Collinsville
23 is downstream of Freeport?

24 WITNESS STARR: Yes, it's downstream of
25 Freeport.

1 MR. MIZELL: Therefore, it would also be
2 downstream of the treatment plant?

3 WITNESS STARR: Yes.

4 MR. MIZELL: Thank you.

5 WITNESS STARR: Again, this doesn't appear to
6 present any information at or near our intake, though.
7 And it's dated August 2015, so my assumption is that
8 the data supporting it is maybe at latest 2014.

9 MR. MIZELL: I appreciate the explanation. Is
10 it true, however that this statement indicates a trend
11 is to a declining population of microcystis as you
12 travel upstream?

13 MR. MILLIBAND: Objection, misstates the
14 testimony.

15 CO-HEARING OFFICER DODUC: The witness may
16 clarify that.

17 WITNESS STARR: So, again, I can't look at
18 this. You've only provided me two pages of the
19 document to review right now, and I can't remember it
20 all. So it's hard to look at this paragraph and
21 understand. But they've presented this as though the
22 information they've collected in the Delta at the edge
23 of where the Delta occurrence at the time period they
24 were interested in, it does end at Collinsville. I
25 don't know if they collected any further samples

1 upstream or again when they collected them because, if
2 they collected them in the winter months, it would be
3 highly unlikely to be present.

4 MR. MIZELL: Okay. I'll move on.

5 What impact do American River -- what impact
6 upon American River turbidity to the Folsom Dam
7 operations have?

8 WITNESS STARR: It's a pretty favorable
9 impact, in fact, because Folsom Dam is basically a
10 large pre-sedimentation basin. And it holds, you know,
11 almost a million acre-feet of water. And historically
12 it's been operated to hold that water through the
13 spring months and provide detention. And so the Lower
14 American River has very clear water with a low
15 turbidity throughout the probably summer and well into
16 the fall.

17 MR. MIZELL: I'm going to attempt to again
18 follow the Board's instructions to be efficient, but
19 humor me. It may be a more general question than I
20 would otherwise ask, just trying to be inclusive here.

21 In your review of data for the early
22 long-term, you again, as stated previously, that you
23 compared the existing conditions to Alternative 4 H4;
24 is that correct?

25 WITNESS STARR: I think, like, in the

1 residence time, you actually didn't present information
2 for Alternative 4 H4; you only presented it for 4 H3.
3 So I used that when that was available. But if 4 H4
4 was available, I would use that information.

5 MR. MIZELL: I'm referring specifically to the
6 information reviewed for your testimony today. So the
7 graphs that we previously went over --

8 WITNESS STARR: Do you mean regarding storage
9 volume and river flows?

10 MR. MIZELL: I'll try to be more specific.

11 Can we bring up Paragraph 51 of Ms. Starr's
12 testimony.

13 Based upon Figure 4.3.1-6, you allege that
14 Shasta Reservoir storage volumes are less than existing
15 conditions, correct?

16 WITNESS STARR: Yes.

17 MR. MIZELL: And this figure would be based
18 upon comparison with the early long-term climate change
19 scenario, correct?

20 WITNESS STARR: Figure 4.3.1-6 is the early
21 long-term, yeah.

22 MR. MIZELL: Isn't it true that all
23 alternatives, based on the early long-term, this graph,
24 include 20,000 acres of habitat?

25 WITNESS STARR: Again, you've asked that

1 question. I can't answer that.

2 MR. MIZELL: You are aware that the early
3 long-term scenarios do include some habitat however,
4 correct?

5 WITNESS STARR: My understanding of the
6 Recirculated Draft is that the conditions did change
7 with regard to how the conservation measures would be
8 included from a permitting aspect and that some amount
9 of those were included in the modeling.

10 But I didn't evaluate the details of what
11 additional conservation measures -- or there is there
12 was a change in name of them. They weren't called
13 conservation measures anymore.

14 Did the modeling actually change to reflect
15 that? Because I wasn't -- I didn't evaluate that.

16 MR. MIZELL: No. I think we have your answer,
17 so I won't belabor the point any further.

18 Isn't it true that the California WaterFix
19 will not change upstream reservoir criteria for any
20 upstream reservoirs?

21 WITNESS STARR: My review --

22 MR. BEZERRA: Objection, we've been through
23 this at great length as to what operational criteria
24 or --

25 CO-HEARING OFFICER DODUC: Where are you going

1 with this, Mr. Mizell?

2 MR. MIZELL: I would like to know if the
3 witness is familiar with what Mr. Bezerra referenced,
4 which is I think a lot of testimony that's been put on
5 the record that upstream operational criteria are not
6 changing between the existing conditions, the no-action
7 alternative and the proposed project.

8 MR. BEZERRA: And I'll repeat the objection.
9 It misstates the evidence. There's a distinction
10 between the regulatory rules that apply to upstream
11 storage and the actual operations that may be applied
12 above and beyond the regulatory rules.

13 CO-HEARING OFFICER DODUC: Ms. Starr, what is
14 the extent of your knowledge with respect to
15 petitioner's proposed operation of the upstream
16 reservoirs?

17 WITNESS STARR: I would say that it's -- it's
18 unclear to me from review of the documents because they
19 provide so many -- such a broad range of alternatives
20 for operational Alternative 4A. It was never entirely
21 clear to me what terms and limits were associated with
22 those operations, so I don't think I have a good
23 understanding of what their final operation will be.
24 So I had to use their identification of operation in
25 scenario H3 and H4, which I think has been subsequently

1 broadened a little bit. But I had to make those
2 assumptions moving into my evaluation.

3 MR. MIZELL: I'll accept that answer, move on.

4 Moving to Paragraph 53 of your testimony.

5 In Paragraph 53, you state that reverse flow
6 and tidal effects will be amplified compared to both
7 existing conditions and the no-action alternative,
8 correct?

9 WITNESS STARR: That's what it states.

10 MR. MIZELL: And the basis of your statement
11 is a citation in the Recirculated Draft EIR/EIS about
12 the average annual Delta outflow, correct?

13 WITNESS STARR: Yes.

14 MR. MIZELL: Isn't it true that the most
15 relevant factor regarding reverse flows at the
16 treatment plant would be Sacramento River flow?

17 WITNESS STARR: I'm not sure it's that simple.
18 I'm not a hydrologist it's not my expertise. I have
19 been involved with some -- as part of work on another
20 project, I have some general knowledge about reverse
21 flows in the Sacramento River, and I know that there's
22 quite a few factors at play, that it's not just one
23 thing or the other.

24 MR. MIZELL: So to be clear was -- is it your
25 testimony here today that you do not know if flows

1 would be the most relevant factor?

2 WITNESS STARR: I know they are a factor. I
3 don't know if they are the most relevant factor. That
4 probably varies with time.

5 MR. MIZELL: Are Paragraphs 57 through 69 of
6 your testimony summaries based on the citations
7 previously provided in your testimony?

8 WITNESS STARR: Sorry. Did you ask me a
9 question?

10 MR. MIZELL: Yes. I'll restate it.

11 Are Paragraphs 57 through 69 of your testimony
12 summaries based on the citations previously provided in
13 your testimony?

14 WITNESS STARR: Yes.

15 MR. MIZELL: If I may just have a moment to
16 confer with co-counsel.

17 CO-HEARING OFFICER DODUC: Everyone stand up
18 and stretch.

19 As we're waiting, let me ask who else has
20 cross-examination for this panel? Okay, Mr. Herrick
21 and Ms. Akroyd and Ms. Morris. Well, depending on how
22 long the Department takes, we may have to get back to
23 you tomorrow.

24 Given the level of restlessness up here, I
25 think we might have to break sooner than 6:00 o'clock,

1 but we'll see. How much additional cross-examination
2 do you have?

3 MR. MIZELL: Just a very brief follow-up
4 point.

5 CO-HEARING OFFICER DODUC: Oh, okay. Maybe
6 not.

7 Ms. Morris, how much cross-examination do you
8 anticipate?

9 MS. MORRIS: About ten minutes.

10 CO-HEARING OFFICER DODUC: Okay.

11 Ms. -- Akroyd? I keep mispronouncing your
12 name.

13 MS. AKROYD: Just five minutes, thanks.

14 CO-HEARING OFFICER DODUC: Mr. Herrick, the
15 pressure's on you now.

16 MR. HERRICK: Up to me whether we go to 6:00
17 at night?

18 CO-HEARING OFFICER DODUC: If it's possible to
19 get done with this panel and dismiss them by
20 6:00 o'clock, then that would be my preference.

21 MR. HERRICK: Maybe 15 minutes.

22 CO-HEARING OFFICER DODUC: All right. I think
23 that is doable. So let's shoot for that. Everyone sit
24 back down.

25 You may resume.

1 MR. MIZELL: Thank you.

2 These questions are going to refer to City of
3 Sac-27, City of Sac-28. And maybe just for efficiency
4 purposes, I believe they were combined in one of the
5 PowerPoint slides?

6 MS. McCUE: Exhibit 10.

7 MR. MIZELL: Do you recall which --

8 MS. McCUE: It's Exhibit 10, City Sac 10.

9 MR. MIZELL: Ms. Starr, did you prepare the
10 temperature plots represented on this slide?

11 WITNESS STARR: I did.

12 MR. MIZELL: What's the basis of the
13 information within those temperature plots?

14 WITNESS STARR: Yeah, sure. The temperature
15 data was provided. It's daily average at the two water
16 Treatment Plants provided by the City of Sacramento.
17 And the reservoir flows -- the storage information
18 there is from CDEC, provided which the City of
19 Sacramento and the reservoir -- the storage information
20 there is from CDEC website.

21 And the percent calculations on the Sacramento
22 River were simple calculations using the many storage
23 volumes located on the bottom of the chart that were
24 provided on the CDEC website.

25 MR. MIZELL: So is it fair to say that these

1 charts are simply plots of the data collected from the
2 City of Sacramento or found on CDEC for temperature and
3 reservoir levels?

4 WITNESS STARR: Yes.

5 MR. MIZELL: So to be clear, there was no
6 analysis or computations performed on the data
7 represented in these charts?

8 WITNESS STARR: There's not.

9 MR. MIZELL: And lastly, these plots are the
10 basis upon which you make your conclusions regarding
11 the correlation between temperatures and reservoir
12 levels?

13 WITNESS STARR: No. In fact, they're not the
14 basis of it. In my testimony, I provide reference to
15 other sources of information that document the effect
16 of reservoirs and storage on water temperature. And
17 the California WaterFix documents themselves actually
18 present information on the effects of reservoir storage
19 on temperature.

20 This was just my simple interpretation or
21 method of determining, "Did we see these impacts at our
22 facilities?" more specifically.

23 So I wanted to use real data at our treatment
24 plants, supplemented with real data up from the
25 reservoirs upstream of us to say, "Hey, we know this

1 general knowledge. Did this happen? Did we see
2 evidence of when storage volume went down, temperatures
3 went up? And we certainly saw that, just in terms of a
4 visual presentation.

5 MR. MIZELL: But to be clear, the other
6 information you just referenced is not specific to the
7 water treatment plant locations?

8 WITNESS STARR: Do you mean the general
9 information that I referenced in my testimony, like,
10 from USGS? That's general knowledge information. And
11 then the California WaterFix, actually, you do provide
12 information. And I think it's Appendix -- I think it's
13 -- let me look. Just one second.

14 I think it's the Draft EIR/EIS Appendices 11D
15 and 29C provide temperature information relative --
16 specific to these actual water bodies. Again, this is
17 just supplemental.

18 MR. MIZELL: Correct. Thank you very much.

19 I think I've concluded my questioning.

20 CO-HEARING OFFICER DODUC: Does that conclude
21 the Department's cross-examination of this panel?

22 MR. MIZELL: Yes, thank you very much.

23 CO-HEARING OFFICER DODUC: All right. Does
24 the Department of Interior, Ms. Aufdemberg, do you have
25 cross-examination?

1 MS. AUFDEMBERG: No.

2 CO-HEARING OFFICER DODUC: Ms. Morris, you're
3 up.

4 The only problem is the witnesses will have to
5 turn around to see you.

6 MS. MORRIS: I just have questions for
7 Mr. Weaver.

8 CROSS-EXAMINATION BY MS. MORRIS

9 MS. MORRIS: Stefanie Morris, State Water
10 Contractors.

11 So I learned something new today, and you're
12 going to watch me learn it.

13 If Mr. Ochenduszko could pull up the State
14 Board Website with WaterFix and go to the STP site for
15 me.

16 So while he's doing that, Mr. Weaver, question
17 for you. Earlier when Mr. Berliner was questioning
18 you, he asked you about 1932 and whether it was a dry
19 year versus a below-normal year. Do you recall that?

20 WITNESS WEAVER: Yes.

21 MS. MORRIS: And you testified that you didn't
22 use the historic data which showed on the printout that
23 that was a dry year, correct?

24 WITNESS WEAVER: That's correct.

25 MS. MORRIS: But rather you used in the

1 modeling data, which included climate change, you used
2 the water year type in the modeling data; is that
3 correct?

4 WITNESS WEAVER: That's correct.

5 MS. MORRIS: And your testimony was that that
6 was a below-normal year?

7 WITNESS WEAVER: That is my testimony.

8 MS. MORRIS: To be clear, 1932 was a
9 below-normal year?

10 WITNESS WEAVER: Yes.

11 MS. MORRIS: Are we there?

12 Okay, thank you. So you can go into the
13 CalSim DSM2 modeling, and then no-action alternative
14 with Fall X2 CalSim. Perfect.

15 This won't take long, I promise. And then
16 open that folder. No-action alternative. Yes. And
17 then I want to go to the table that says "CONV."

18 Is this, by the way, Mr. Weaver, what I'm
19 doing right now, is this how you accessed the modeling
20 data to do your analysis?

21 WITNESS WEAVER: That's my recollection, yes.

22 MS. MORRIS: Okay. Then if I could look at
23 the "Run" folder. I have no interest in modeling after
24 trying to find these things.

25 And then the folder "Look-up Table." Okay.

1 Scroll towards the bottom. And the table that I am
2 looking for is the water year type. It's almost nearly
3 towards the bottom. Yes.

4 And then you'll have to open Notebook to open
5 it of course -- Notepad or something like that. Yep.

6 And then just open the window bigger. Yeah,
7 it's going to do this. So if I can just, for the
8 record, I pulled this up. And if you pull up on --
9 this is how I accessed the information. And if you
10 pull up on the flash drive I gave you, SWC_1, it will
11 be a nicer version -- because this is obnoxious to
12 read. It's like it's yelling at you.

13 CO-HEARING OFFICER DODUC: So Ms. Morris, the
14 punch line is?

15 MS. MORRIS: I'm getting there. And then
16 scroll down to 1932 under "Sac Index."

17 Mr. Weaver, isn't it true that in the modeling
18 that was used, 1932, where it says "5," is actually a
19 critical year?

20 WITNESS WEAVER: Could you scroll back up to
21 the top so I could see the title of this table?

22 I'm not sure this is the same -- it's very
23 possible. This is a BDCP run. This isn't the same one
24 I was looking at, but it's possible.

25 MS. MORRIS: Well, if I went into the folder

1 and retrieved this and pdf'd it right now, as I just
2 walked you through, would you agree that this is the
3 same modeling that you were using?

4 MR. BEZERRA: I'm going to object to this. We
5 don't know exactly what these are. We're depending on
6 Ms. Morris's representations of what she pulled out of
7 modeling files.

8 MS. MORRIS: Okay. Mr. Ochenduzsko --

9 CO-HEARING OFFICER DODUC: Go back. Let's go
10 to the ugly file.

11 MS. MORRIS: Thank you.

12 CO-HEARING OFFICER DODUC: It is ugly.

13 MS. MORRIS: Then if you could scroll down in
14 the ugly file, as we've now named it, to the year 1932.
15 It's just -- without -- stretching it out, you can see
16 that the first number on 1932 is a "5"; isn't that
17 correct?

18 WITNESS WEAVER: That's correct.

19 MS. MORRIS: So is that in fact a critical
20 year?

21 WITNESS WEAVER: I believe so.

22 MS. MORRIS: So isn't it true that your
23 analysis for this proceeding is based on an analysis of
24 a critical year followed by another critical year
25 rather than a below-normal year followed by a critical

1 year?

2 WITNESS WEAVER: I would have to go back and
3 review the analysis I did.

4 MS. MORRIS: But you already testified that
5 the analysis is based on the modeling information that
6 you downloaded from this website which we have just
7 walked through; have you not?

8 WITNESS WEAVER: That is correct. Again, I
9 don't recall the basis for my conclusion.

10 MS. MORRIS: I have no further questions.

11 CO-HEARING OFFICER DODUC: Thank you,
12 Ms. Morris.

13 Ms. Akroyd?

14 CROSS-EXAMINATION BY MS. AKROYD

15 MS. AKROYD: Thank you. Rebecca Akroyd for
16 San Luis and Delta-Mendota Water Authority. I have
17 just a few brief questions for Mr. Weaver.

18 If we can first pull up ARWA-100 Page 2.
19 Looking at Paragraph 5B. Thank you.

20 Paragraph 5B -- in Paragraph 5B, Mr. Weaver,
21 you state that the California WaterFix modeling does
22 not appropriately indicate how Reclamation would
23 operate Folsom Reservoir with the WaterFix in the
24 spring of a critically dry water year like 1933 because
25 the modeling contains an unrealistic step function that

1 triggers inappropriate reductions in Lower American
2 River stream flows as a result of projected future low
3 Folsom Reservoir storage, correct?

4 WITNESS WEAVER: Yes.

5 MS. AKROYD: Before we unpack that a little,
6 can you please explain what you mean here a little by
7 the phrase "step function"?

8 WITNESS WEAVER: Sure. That, as I indicated a
9 couple hours ago, when the model forecasts a storage
10 any time within the next 12 months below 200,000
11 acre-feet, it allows the MRR -- actually, it sets the
12 MRR, the minimum release requirement, to whatever the
13 minimum allowable is under Decision 893.

14 So rather than having some sort of mitigated
15 or moderated MRR, it sets the MRR all the way at the
16 absolute lowest possible.

17 MS. AKROYD: Thank you. And the step function
18 that you described, is that the same step function in
19 CalSim 2 that produced the modeled releases in your
20 PowerPoint presentation?

21 WITNESS WEAVER: Yes, it is.

22 MS. AKROYD: Thank you. Did you help write
23 that code?

24 WITNESS WEAVER: I did.

25 MS. AKROYD: Now, I understand that step

1 functions can be a source of anomalies in model results
2 because relatively minor changes and conditions can
3 produce meaningful differences in operations and
4 response, correct?

5 WITNESS WEAVER: Correct.

6 MR. BEZERRA: Objection, Mr. Weaver has no
7 personal knowledge as to Ms. Akroyd's personal
8 understanding of how modeling takes place.

9 CO-HEARING OFFICER DODUC: Actually, he's
10 answered it already, so let's move on.

11 MS. AKROYD: Would you agree that looking at
12 long-term averages for water year types rather than
13 focusing on a single month or year of a simulation
14 helps smooth out anomalies in model results from step
15 functions?

16 WITNESS WEAVER: I don't believe looking at
17 long-term averages is an appropriate way to evaluate
18 the effects of a project.

19 MS. AKROYD: That didn't answer my question.

20 WITNESS WEAVER: Please restate your question.

21 MS. AKROYD: Sure. Would you agree that
22 looking at long-term averages for water year types
23 rather than focusing on a single month or year of a
24 simulation helps smooth out anomalies in model results
25 from step functions?

1 WITNESS WEAVER: Assuming that the modeling is
2 generally realistic, yes.

3 MS. AKROYD: But you did not present the
4 long-term average results in your presentation,
5 correct?

6 WITNESS WEAVER: That's correct.

7 MS. AKROYD: Nothing further.

8 CO-HEARING OFFICER DODUC: Thank you.

9 Mr. Herrick?

10 Let me check to make sure. Does anyone else
11 have cross-examination?

12 All right. Mr. Herrick.

13 CROSS-EXAMINATION BY MR. HERRICK

14 MR. HERRICK: Thank you, Madams Chair, Board
15 Members.

16 John Herrick for the South Delta Water Agency.

17 I have a couple of questions for Mr. Weaver
18 dealing with the modeling assumptions and reliability
19 and then just a very few questions for Mr. Mehl and
20 Ms. Starr.

21 Mr. Weaver, there seems to be some confusion,
22 I think, about what is presented or has been presented
23 with regard to reservoir operations. Is there a
24 difference between the criteria for reservoir
25 operations and actual operations in certain

1 circumstances?

2 WITNESS WEAVER: Yes, there is.

3 MR. HERRICK: Is it correct to say that one
4 could operate a reservoir in compliance with a criteria
5 but that you would have different storage left over,
6 depending on water year types or other actions?

7 WITNESS WEAVER: Yes, that's correct.

8 MR. HERRICK: So you could actually operate
9 something under different scenarios in this proposed
10 project and come up with different results; is that
11 correct?

12 WITNESS WEAVER: That's correct.

13 MR. HERRICK: And the key issue in front of
14 the Board is whether or not the results are different,
15 not whether or not the operations criteria are
16 different?

17 WITNESS WEAVER: We are only evaluating, in
18 this case, the results.

19 MR. HERRICK: Now, I want to -- this may not
20 be correct, but I want to represent to you that I think
21 we heard earlier in this hearing that the projects
22 under this -- excuse me, DWR and the Bureau would not,
23 under this project, operate their reservoirs in a
24 different manner. Do you recall them saying that?

25 WITNESS WEAVER: Different manner from what?

1 MR. HERRICK: From how they operate them now.

2 WITNESS WEAVER: My understand -- my
3 understanding of the modeling is that they assumed that
4 the modeling would occur as it has historically.

5 MR. HERRICK: So is it correct to say they're
6 going to operate it under the original criteria but
7 that, depending upon the circumstances, the modeling
8 does show different operations of the reservoirs?

9 MR. BEZERRA: I'm going to object.
10 Mr. Weaver's analysis was based on a review of discrete
11 modeling files and not based on his review of testimony
12 by other witnesses.

13 CO-HEARING OFFICER DODUC: Mr. Weaver, are you
14 able to answer the question?

15 WITNESS WEAVER: I haven't reviewed other
16 testimony, so I can't --

17 MR. HERRICK: I'll end with the question -- I
18 just wanted to confirm. Is it your testimony that the
19 analyses done in support of the petition do include
20 different operations of reservoirs, different than
21 currently occur now?

22 WITNESS WEAVER: The simulation of the
23 American River does -- and Folsom Reservoir and the
24 Lower American River, that modeling is consistent with
25 other modeling that's been done for the existing

1 conditions.

2 I don't believe that there's any difference in
3 the American River operations under this proposed
4 project.

5 MR. HERRICK: Mr. Weaver, there were numerous
6 questions presented to you dealing with -- let me start
7 over.

8 Do you have an opinion on -- as to whether or
9 not models used for comparative purposes can or should
10 be used for predicting impacts to other legal users?

11 WITNESS WEAVER: I think with close review --
12 yes, I do have an opinion. With close review and
13 consideration of the elements that went into that
14 modeling, then meaningful results can be extracted.

15 MR. HERRICK: Do you have any experience with
16 models predicting reservoir levels being different than
17 actually happened?

18 WITNESS WEAVER: Yes.

19 MR. HERRICK: And so if the modeling here is
20 estimating a reservoir level, do you have any opinion
21 as to the reliability of that actual number for the
22 storage?

23 WITNESS WEAVER: I think that modeling
24 that's -- again, focusing on the American River and
25 Folsom Reservoir, I think that the modeling makes it

1 difficult to ascertain exactly what the effects might
2 be because of modeling unrealistic elements --
3 unrealistic modeling of certain elements.

4 MR. HERRICK: So forgetting the dead pool
5 issues here the models that we are using may actually
6 predict something above dead pool incorrectly is that
7 right?

8 WITNESS WEAVER: That's correct.

9 MR. HERRICK: And if it was over-predicting
10 it, there might be adverse impacts to people relying on
11 that storage correct?

12 WITNESS WEAVER: That's correct.

13 MR. HERRICK: Has DWR or the Bureau, to your
14 knowledge, presented anything that indicates the
15 reliability of that modeling?

16 WITNESS WEAVER: Not to my knowledge.

17 MR. HERRICK: Thank you.

18 Let me turn to Mr. Mehl. I'm not is saying
19 that wrong, am I?

20 WITNESS MEHL: Mehl.

21 MR. HERRICK: Mehl. See?

22 In your testimony, you reference Mr. Parvis
23 Nader Tehrani's description of changes in water stage
24 or water level; do you recall that?

25 WITNESS MEHL: Yes.

1 MR. HERRICK: And Mr. Tehrani put the number
2 at 1.2 feet during high flows as the -- correct me if
3 I'm wrong == as the maximum change in water elevation?

4 WITNESS MEHL: Yeah, I believe so.

5 MR. HERRICK: And I apologize for quizzing you
6 on his testimony, but do you know whether that 1.2 is
7 some absolute number or an average over a time period
8 or do you know?

9 WITNESS MEHL: I do not know.

10 MR. HERRICK: Okay. But whatever it was, his
11 testimony did not then calculate how that change in
12 water level might affect groundwater supplies, did he?

13 WITNESS MEHL: That's correct, he did not do
14 that.

15 MR. HERRICK: And Mr. Munevar's testimony
16 similarly, although touched upon the topic based on the
17 CalSim model's treatment of accretions and losses, it
18 also did not calculate the effects on the groundwater;
19 is that correct?

20 WITNESS MEHL: Yeah, those results weren't
21 presented.

22 MR. HERRICK: In your opinion, is it necessary
23 to quantify the effects on the groundwater basin before
24 we can determine whether there are adverse effects from
25 the California WaterFix on the users of that

1 groundwater basin?

2 WITNESS MEHL: I'm sorry. Can you say that
3 again?

4 MR. HERRICK: Would you agree that it's
5 necessary to somehow calculate the effects on the
6 groundwater basin in order for us to determine whether
7 or not there are adverse effects on users of that
8 basin?

9 WITNESS MEHL: Yeah. I mean, in this case,
10 yes.

11 MR. HERRICK: And of course, Mr. Mehl,
12 whatever entity is eventually charged with the
13 responsibility of implementing the Sustainable
14 Groundwater Management Act will have to take these sort
15 of issues into consideration, correct?

16 WITNESS MEHL: I believe so, yes.

17 MR. HERRICK: So if the California WaterFix
18 has an adverse affect on the basin you were talking
19 about, then that will somehow have to be addressed by
20 the whatever Sigma group -- sorry -- SGMA group is
21 responsible for that area, correct?

22 WITNESS MEHL: That's my understanding, yes.

23 MR. HERRICK: Thank you. Just a couple more.
24 I'm sorry for keeping everybody late.

25 Ms. Starr, if I may ask you a couple

1 questions.

2 If a reservoir is at a lower level -- excuse
3 me. If a reservoir level drops, does that reservoir
4 then absorb heat at a different rate than it would have
5 when it was higher?

6 WITNESS STARR: Yes.

7 MR. HERRICK: Is that one of the factors you
8 take into consideration when you analyze whether or not
9 the growth of algal blooms?

10 WITNESS STARR: Yes, that's presented in my
11 written testimony.

12 MR. HERRICK: And the residence time of the
13 flow down the river is also one of the factors you
14 stated; is that correct?

15 WITNESS STARR: Yeah, residence time or the
16 velocity of the river, you know, basically you're
17 looking toward more calmer conditions.

18 MR. HERRICK: And that residence time, as it
19 increases, may also allow increases in temperature that
20 may not occur if it was flowing faster?

21 WITNESS STARR: Probably, yes.

22 MR. HERRICK: Is the residence time, does it
23 also have an effect on the accumulation or the ability
24 of the algal bloom to occur or to increase in size?

25 WITNESS STARR: Yes.

1 MR. HERRICK: You testified that you have, in
2 fact, detected -- I think it was microcystis or
3 microcystin at both of the Sacramento intakes for
4 treatment plants, or was it just the Folsom River one?

5 WITNESS STARR: Anatoxin was at both, and
6 microcystin was at the Fairbairn Water Treatment Plant.

7 MR. HERRICK: So whether or not the existence
8 of those toxins is rare, you have a conclusion with
9 regard to whether or not the California WaterFix will
10 affect that rareness; is that correct?

11 WITNESS STARR: We're concerned that the
12 project operations will result in this more frequently
13 happening or becoming a larger scenario.

14 MR. HERRICK: If I could see, this would be
15 easier.

16 Oh, I just wanted to ask Mr. Weaver a couple
17 more. Sorry.

18 Mr. Weaver, you testified as to the off-ramp
19 regarding operations of Folsom under the -- was it a
20 biological opinion; is that correct?

21 WITNESS WEAVER: It is contained in a
22 biological opinion.

23 MR. HERRICK: And the point you were making
24 was that those operational criteria were not used in
25 the modeling presented for the WaterFix; is that

1 correct?

2 WITNESS WEAVER: No, that's incorrect. The
3 off-ramp was included in the modeling.

4 MR. HERRICK: But you had an issue with how
5 fast draw down would occur; is that correct?

6 WITNESS WEAVER: My concern with the off-ramp
7 was that it switched to -- it applied a much lower
8 minimum release requirement than is realistic.

9 MR. HERRICK: I misunderstood that. Thank
10 you.

11 That's all I have. Thank you very much.

12 CO-HEARING OFFICER DODUC: Thank you
13 Mr. Herrick.

14 Mr. Ferguson any redirect for your witnesses?

15 MR. FERGUSON: No.

16 CO-HEARING OFFICER DODUC: Mr. Milliband, any
17 redirect?

18 MR. MILLIBAND: No, Madam Chair.

19 CO-HEARING OFFICER DODUC: Mr. Bezerra, I'm
20 going to offer you an opportunity return in the morning
21 to do any redirect of Mr. Weaver especially in response
22 to Ms. Morris's cross-examination. Would you like to
23 take me up on that offer?

24 MR. BEZERRA: Yes, I would love to take you up
25 on the offer to come back tomorrow morning.

1 CO-HEARING OFFICER DODUC: In that case, then
2 the other witnesses on this panel are dismissed, and we
3 will see Mr. Weaver back here in the morning.

4 MR. BEZERRA: Thank you.

5 CO-HEARING OFFICER DODUC: Thank you, all.
6 We'll see you back here at 9:00 o'clock.

7 (Whereupon, the proceedings recessed
8 at 5:07 p.m.)

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1 STATE OF CALIFORNIA)
2 COUNTY OF MARIN) ss.

3 I, DEBORAH FUQUA, a Certified Shorthand
4 Reporter of the State of California, do hereby certify
5 that the foregoing proceedings were reported by me, a
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9 I further certify that I am not of counsel or
10 attorney for either or any of the parties in the
11 foregoing proceeding and caption named, nor in any way
12 interested in the outcome of the cause named in said
13 caption.

14 Dated the 2nd day of November, 2016.

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DEBORAH FUQUA
CSR NO. 12948