

1 APPEARANCES

2 CALIFORNIA WATER RESOURCES BOARD

3 Division of Water Rights

4 Board Members Present:

5 Tam Doduc, Co-Hearing Officer
6 Felicia Marcus, Chair & Co-Hearing Officer
7 Dorene D'Adamo, Board Member

8 Staff Present:

9 Andrew Deeringer, Senior Staff Attorney
10 Conny Mitterhofer, Supervising Water Resource Control
11 Engineer
12 Jean McCue, Water Resources Control Engineer

13

14 PART 2

15 For Petitioners:

16 California Department of Water Resources:

17 Jolie-Anne Ansley
18 Cathy Cavanaugh

19

20 The U.S. Department of the Interior:

21

22 Amy L. Aufdenberge, Esq.

23

24 INTERESTED PARTIES:

25 For The City of Roseville, Sacramento Suburban Water
District, San Juan Water District, The City of Folsom,
and Yuba County Water Agency:

26 Ryan Bezerra

27 For Grassland Water District:

28 Ellen Wehr

29

30

1 APPEARANCES (Continued)

2 INTERESTED PARTIES (Continued):

3 For the Environmental Justice Coalition for Water,
4 Islands, Inc., Local Agencies of the North Delta, Bogle
5 Vineyards/Delta Watershed Landowner Coalition, Diablo
6 Vineyards and Brad Lange/Delta Watershed Landowner
7 Coalition, Stillwater Orchards/Delta Watershed
8 Landowner Coalition, Brett G. Baker and Daniel Wilson,
9 Save Our Sandhill Cranes, Friends of Stone Lakes
10 National Wildlife Refuge, the County of Yolo:

11 Osha Meserve

12 For State Water Contractors:

13 Stefanie Morris

14 For Restore the Delta:

15 Tim Stroshane

16 For County of San Joaquin, San Joaquin County Flood
17 Control and Water Conservation District, and Mokelumne
18 River Water and Power Authority:

19 Thomas H. Keeling

20 For California Sportfishing Protection Alliance (CSPA),
21 California Water Impact Network (C-WIN), and
22 AquAlliance:

23 Michael Jackson

24 For Sacramento County Water Agency, Glenn-Colusa
25 Irrigation District, Biggs-West Gridley Water District,
Carmichael Water District as well as Placer County
Water Agency and the County of Sacramento:

26 Aaron Ferguson

27 For California Water Research:

28 Deirdre Des Jardins

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APPEARANCES (Continued)

INTERESTED PARTIES (Continued):

For Central Delta Water Agency, South Delta Water Agency (Delta Agencies), Lafayette Ranch, Heritage Lands Inc., Mark Bachetti Farms and Rudy Mussi Investments L.P.:

Dean Ruiz, Esq.

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I N D E X (Continued)

THE ENVIRONMENTAL JUSTICE COALITION FOR WATER,
ISLANDS, INC., LOCAL AGENCIES OF THE NORTH DELTA, BOGLE
VINEYARDS/DELTA WATERSHED LANDOWNER COALITION, DIABLO
VINEYARDS AND BRAD LANGE/DELTA WATERSHED LANDOWNER
COALITION, STILLWATER ORCHARDS/DELTA WATERSHED
LANDOWNER COALITION, BRETT G. BAKER AND DANIEL WILSON,
SAVE OUR SANDHILL CRANES, FRIENDS OF STONE LAKES
NATIONAL WILDLIFE REFUGE, THE COUNTY OF YOLO,
SAN JOAQUIN COUNTY, SACRAMENTO COUNTY, YOLO COUNTY,
SOUTH AND CENTRAL DELTA WATER AGENCIES, AND CSPA AND
AQUALLIANCE
WITNESSES

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ROBINSON, DAVID
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1 Tuesday, March 13, 2018 9:30 a.m.

2 PROCEEDINGS

3 ---000---

4 CO-HEARING OFFICER DODUC: Good morning. It
5 is 9:30. Welcome back.

6 I am Tam Doduc. To my right is Board Chair
7 and Co-Hearing Officer Felicia Marcus. Hopefully,
8 you're all here for the Water Right Change Petition
9 hearing for the California WaterFix Project.

10 To my left are Andrew Deeringer and Jean
11 McCue.

12 We're also being assisted today by Mr. Hunt
13 and Miss Perry.

14 Usual three announcements:

15 Alarm goes off. We leave. Take care crossing
16 the street in the rain. Don't slip. Take the stairs,
17 not the elevators. Flag down one of the orange
18 fluorescent-colored-wearing people if you cannot take
19 the stairs and they will direct you to a protective
20 area.

21 Secondly, please speak into the microphone
22 when you provide your comments today. Begin by
23 identifying yourself and stating your affiliation for
24 the benefit of both the Webcasting audience as well as
25 web recording.

1 Our court reporter is here. Welcome back.

2 Thank you for not running away.

3 Please make arrangements with her directly if
4 you would like to have a copy of the transcript sooner
5 than when we would make it available, which would be at
6 the conclusion of Part 2.

7 And, finally and most importantly, please take
8 a moment and put all your noise-making devices to
9 silent, vibrate, do not disturb.

10 All right. Housekeeping items.

11 Mr. Bezerra.

12 MR. BEZERRA: Yes. Good morning. So, I have
13 been attempting to do some informal polling.

14 CO-HEARING OFFICER DODUC: Ah, Miss Meserve,
15 look at what you have started.

16 MR. BEZERRA: Yes.

17 CO-HEARING OFFICER DODUC: A trendsetter.

18 MR. BEZERRA: Thank you, Ms. Meserve.

19 It a -- So, between now and the time that the
20 Water Forum panels come up, there are five panels.

21 Based on my informal polling, we may move very
22 quickly through all of those panels and reach The Water
23 Forum panels sometime the next few days.

24 So, we're working on some scheduling issues.

25 Just a heads-up that we're working on scheduling issues

1 and I'm hoping to bring back a, you know, full-blown
2 solution to you after lunch today.

3 We have one witness that has a displaced disk
4 in his back, and so he physically cannot stay here and
5 cool his jets for hours on end, so we're having to work
6 through how we can make that work. We think we've got
7 an approach to that it. But hopefully, by after lunch,
8 they will have a full-blown solution for how that can
9 all work.

10 CO-HEARING OFFICER DODUC: And you are
11 involving Petitioners in your discussions.

12 MR. BEZERRA: Yes --

13 CO-HEARING OFFICER DODUC: Thank you.

14 MR. BEZERRA: -- thoroughly and expensively.
15 Thank you.

16 CO-HEARING OFFICER DODUC: All right.

17 Any other housekeeping matter? Not seeing
18 any . . .

19 Ms. Wehr. And you're down to one witness?

20 MS. WEHR: Yes. Our second witness,
21 Mr. Hansen, is on his way.

22 CO-HEARING OFFICER DODUC: I know how it goes.

23 MS. WEHR: So if we could start with
24 Mr. Ortega's testimony first.

25 CO-HEARING OFFICER DODUC: All right. We'll

1 begin with that.

2 Thank you for your patience these last few
3 days.

4 If you would stand and raise your right hand.

5

6

7 RICARDO ORTEGA,

8 called as a witness by the Grassland Water

9 District, having been duly sworn, was examined

10 and testified as follows:

11 CO-HEARING OFFICER DODUC: Thank you.

12 MS. WEHR: Good morning. Ellen Wehr for
13 Grassland Water District.

14 DIRECT EXAMINATION

15 MS. WEHR: Mr. Ortega, is Exhibit GWD-15 a
16 true and correct copy of your Statement of
17 Qualifications?

18 WITNESS ORTEGA: Yes, it is.

19 CO-HEARING OFFICER DODUC: I'm sorry. Your
20 microphone's not on.

21 WITNESS ORTEGA: Yes, it is.

22 MS. WEHR: Could you briefly review your
23 qualifications.

24 WITNESS ORTEGA: Sure.

25 I'm the General Manager of the Grassland Water

1 District and also a trained wildlife biologist.

2 I'm responsible for the management,
3 supervision of the Grassland Water District, its
4 personnel, Contractors, facilities, finances,
5 agreements and its Refuge water supply.

6 I serve as a Director on the San Luis
7 Delta-Mendota Water Authority and a coordinator on the
8 Central Valley Project Improvement Act persinctive(*)
9 Program with Reclamation.

10 I hold degrees in ecology, biology, and avian
11 sciences and previously worked as a biologist.

12 MS. WEHR: Thank you.

13 Is Exhibit GWD-14 a true and correct copy of
14 your written testimony?

15 WITNESS ORTEGA: Yes, it is.

16 MS. WEHR: And is Exhibit GWD-17 a true and
17 correct copy of Grassland Water District's Refuge Water
18 Supply Contract with the Bureau of Reclamation?

19 WITNESS ORTEGA: Yes.

20 MS. WEHR: Is Exhibit GWD-18 a true and
21 correct copy of a letter, dated May 7th, 2017, from
22 Senator Dianne Feinstein to Deputy Secretary of
23 Interior Michael Connor.

24 WITNESS ORTEGA: Yes.

25 MS. WEHR: Is Exhibit GWD-19 a true and

1 correct -- correct copy of the U.S. Bureau of
2 Reclamation's 2017 Rescheduling Guidelines for the
3 persinctive(*) Storage in San Luis Reservoir?

4 WITNESS ORTEGA: Yes.

5 MS. WEHR: persinctive(*)20 a true and correct
6 copy of the Land Use and Economic Study for the
7 Grasslands Ecological Area?

8 WITNESS ORTEGA: Yes.

9 MS. WEHR: And is Exhibit GWD-21 a true and
10 correct copy of a letter, dated September 15th, 2017,
11 from Bureau of Reclamation Regional Director David
12 Murillo to yourself?

13 WITNESS ORTEGA: Yes.

14 MS. WEHR: Thank you.

15 Mr. Ortega, will you be using a PowerPoint
16 presentation to assist in providing your testimony
17 today?

18 WITNESS ORTEGA: Yes.

19 MS. WEHR: And is Exhibit GWD-16 a true and
20 correct copy of that presentation?

21 WITNESS ORTEGA: Yes, it is.

22 MS. WEHR: If you could please, Mr. Hunt, pull
23 up Exhibit GWD-16.

24 (Exhibit displayed on screen.)

25 MS. WEHR: I see that my second witness is

1 here.

2 And I'll turn it over to you, Mr. Ortega, for
3 your testimony.

4 WITNESS ORTEGA: Okay. Thank you.

5 Again, my name is persinctive(*). I'm the
6 General Manager of the Grassland Water District and a
7 trained wildlife biologist.

8 I'll summarize my written testimony and
9 discuss my opinions about the importance of the public
10 and private Wildlife Refuges located south of the Delta
11 that receive Central Valley Project water supply.

12 I will also give my opinion about the
13 unreasonable injury that would occur if WaterFix
14 Project is approved and operated in a way that
15 interferes with water deliveries from the Delta to the
16 Refuges.

17 Please go to Slide 2.

18 (Exhibit displayed on screen.)

19 WITNESS ORTEGA: This quote is from a Bureau
20 of Reclamations study of Refuge water supply needs. It
21 states the importance of the Refuges for wildlife,
22 recreation, the economy and the public interest.

23 In the early 1900s through the 1970s, the
24 Central Valley lost significant areas of wetland to
25 flood control projects, habitat conversion and

1 reservoir construction. The wetlands that remained
2 relied on agricultural return flows and low-priority
3 water contracts.

4 A drought in the 1970s led to the studies by
5 an agency such as Reclamation to develop the baseline
6 water supply needs for waterfowl using the remaining
7 wetlands.

8 Those studies were also intended to mitigate
9 for the loss of agricultural return flows in the
10 San Joaquin Valley that were deemed unsuitable for
11 Refuges due to selenium contamination.

12 Can you pull up Slide 3.

13 (Exhibit displayed on screen.)

14 WITNESS ORTEGA: Slide 3 contains a short
15 video that emphasizes the importance of water for
16 Refuges in the Grassland Ecological Area.

17 (Video played but not reported.)

18 WITNESS ORTEGA: Apologies for the audio on
19 that. I think it might have just been a buffering
20 situation but . . .

21 Okay. So if we could go to Slide 4.

22 (Exhibit displayed on screen.)

23 WITNESS ORTEGA: The Central Valley
24 Project . . .

25 (Pop-up add begins playing on computer.)

1 (Laughter.)

2 WITNESS ORTEGA: That was right on queue.

3 So Slide 4. Thank you.

4 The Central Valley Project Improvement Act
5 Refuge Water Supply Program is carried out by the
6 Bureau of Reclamation in cooperation with other
7 entities, and Refuge water is supplied under long-term
8 contracts.

9 Reclamation delivers two-thirds of Refuge
10 water from the Central Valley Project, and that's
11 called Level 2 water, and the -- and acquires the
12 remaining one-third from willing sellers. Together,
13 these sources make up a full Level 4 water supply,
14 which is the water required for optimal habitat
15 management.

16 The volume of Level 2 water from the Delta to
17 Refuges is approximately 240,000 acre-feet per year.
18 The water is delivered on a monthly schedule and on a
19 priority basis similar to the San Joaquin River
20 Exchange Contractors with up to a 25 percent shortage
21 in critically dry years.

22 Reclamation is required by the Central Valley
23 Project Improvement Act to deliver this water and the
24 Refuges typically receive 100 percent of its level to
25 allocation.

1 Next slide, please.

2 (Exhibit displayed on screen.)

3 WITNESS ORTEGA: The Refuges provide
4 recreational benefits for hunters, anglers, bird
5 watchers, school children, and many others.

6 After decades of investment, recreational use
7 on the Refuges is now 40 percent above historic
8 projections. Refuges provide the only option for
9 public waterfowl hunting in the Central Valley, as well
10 as automobile tour routes, photography blinds, hiking
11 trails, interpretive facilities, and Visitor Centers
12 all located within disadvantaged communities of Merced,
13 Fresno and Kern County.

14 The Grassland Environmental Education Center
15 alone hosted 10,000 local school children and adults in
16 2017.

17 Refuges also provide economic benefits to
18 Central Valley communities. And the grass and
19 ecological area contributes 47 million to the local
20 economy each year.

21 There are also avoided costs due to
22 groundwater recharge, wetland water filtration of
23 nitrates, flood protection, erosion control, reduced
24 predation of crops, and the maintenance of viable
25 populations of otherwise vulnerable wildlife species.

1 Next slide, please.

2 (Exhibit displayed on screen.)

3 WITNESS ORTEGA: The WaterFix Project would
4 reduce South-of-Delta exports.

5 In Part 1 of this hearing, Petitioners'
6 witness -- witnesses testified that Refuge water
7 deliveries would be given priority and that the
8 existing CVP water allocation methods would be
9 preserved.

10 But in September of 2017, Reclamation issued a
11 letter to CVP Contractors stating that they would not
12 participate financially in WaterFix or secure the
13 future use of WaterFix capacity to export CVP water.

14 Instead, individual Contractors can secure
15 capacity and the CVP water diverted through the
16 WaterFix will be delivered to those Contractors through
17 an additional CVP water allocation.

18 Reclamation stated that mitigation measures
19 would need to be developed for the resulting decrease
20 in water allocations to non-participating CVP
21 Contractors.

22 Next slide, please.

23 (Exhibit displayed on screen.)

24 WITNESS ORTEGA: I will review four examples
25 of how WaterFix Project -- the WaterFix Project will

1 adversely affect the supply, timing, and reliability of
2 Refuge water supplies and cause adverse effects on
3 wildlife, recreation and the public interest.

4 The first example is the impact on
5 Reclamation's ability to meet Refuge water delivery
6 schedules.

7 The Refuges need water primarily in the fall
8 and winter but also in the spring and summer to grow
9 beneficial food crops for -- for the wildlife that
10 depend on these areas in the winter months.
11 Reclamation already has difficulty meeting our monthly
12 schedules due to restrictions on Delta pumping.

13 In 2014 and 2015, the Refuges received no
14 water in the spring, summer or early fall.

15 These satellite images on the slide show what
16 are usually green, healthy flooded wetlands which
17 received no water in 2015 until mid-October.

18 This caused -- And -- And so the -- the
19 successive years of -- of not being able to provide
20 water to -- to these habitats caused a 50 percent
21 decline in food and a drop in wildlife numbers.

22 If there are further reductions on
23 South-of-Delta pumping and Reclamation cannot convey
24 Refuge water to the WaterFix facilities, the ability to
25 meet the monthly Refuge schedules would be further

1 impaired.

2 Next slide, please.

3 (Exhibit displayed on screen.)

4 WITNESS ORTEGA: The second example is the
5 impact on Reclamation's ability to balance
6 environmental water needs for fish and wildlife. These
7 include Refuge water supplies, coldwater pool
8 requirements, Old and Middle River Pumping restrictions
9 and inflow-to-export ratio and Delta outflow standards.
10 The WaterFix Project would increase OMR restrictions
11 and Delta outflow standards.

12 But even under today's standards, Reclamation
13 must frequently meet with Refuge Managers, including
14 myself, and make real-time adjustments to Refuge
15 delivery schedules.

16 If the WaterFix Project is approved with
17 increased Delta protections without protections for
18 Refuge water supplies, Reclamation will have less
19 ability to balance the needs for fish and wildlife.

20 Next slide, please.

21 (Exhibit displayed on screen.)

22 WITNESS ORTEGA: The third example is the
23 impact caused by the failure to fund Refuge water
24 conveyance.

25 Reclamation is required to pay for the

1 delivery of Level 2 water and to collect mitigation
2 payments from CVP beneficiaries to reimburse those
3 costs.

4 If Reclamation fails to request needed
5 appropriations or collect offsetting payments from CVP
6 customers, this is equal to a failure to meet the
7 Refuge water delivery requirements of the Central
8 Valley Project Improvement Act.

9 Reclamation has decided not to pay for the use
10 of WaterFix facilities for Refuge water supplies but to
11 allow Contractors to individually pay for the new
12 priority allocation of CVP water.

13 If Reclamation is allowed to send CVP water
14 through the WaterFix Project without securing a right
15 to meet its priority water obligations to Refuges, this
16 will have an adverse effect on wildlife.

17 Next slide, please.

18 (Exhibit displayed on screen.)

19 WITNESS ORTEGA: My final example is the
20 impact of rescheduling of Refuge water in San Luis
21 Reservoir.

22 When there is extra capacity in the reservoir,
23 Central Valley Project contractors can reschedule their
24 water allocations from the current water year into the
25 next water year.

1 The Refuges often reschedule a small volume of
2 water from the winter into the following spring and
3 summer. This helps offset Reclamation's failure to
4 acquire Incremental Level 4 supplies on the schedule
5 that the Refuge needs.

6 The ability to reschedule Refuge water is
7 critical for providing sufficient habitat and food for
8 wildlife.

9 Reclamation's Rescheduling Guidelines for
10 San Luis Reservoir gave Refuge water a lower
11 rescheduling priority than irrigation water.

12 Reclamation has proposed to allow the new
13 WaterFix allocation to be rescheduled in a similar
14 fashion to the existing guidelines. This means that
15 increased Delta exports of irrigation water as a result
16 of the WaterFix could displace capacity that is used
17 for rescheduling Refuge water. This will reduce Refuge
18 water supplies in the spring and summer and adversely
19 affect the impact -- the habitat. I'm sorry.

20 This concludes my testimony.

21 Thank you.

22 CO-HEARING OFFICER DODUC: Thank you,
23 Mr. Ortega.

24 Welcome, Mr. Hansen. If you would stand and
25 raise your right hand.

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ERIC HANSEN,

called as witness by the Grassland Water District, having been duly sworn, was examined and testified as follows:

CO-HEARING OFFICER DODUC: Thank you.

Miss Wehr.

MS. WEHR: Hello, Mr. Hansen. Glad you made it here safe.

Is Exhibit GWD-10 a true and correct copy of your Statement of Qualifications?

WITNESS HANSEN: Yes, it is.

MS. WEHR: Is your microphone on?

WITNESS HANSEN: There. Can you hear me?

MS. WEHR: Yes. Could you briefly review your qualifications.

WITNESS HANSEN: So, my name is Eric Hansen, and I'm a professional wildlife biologist, a trained environmental biologist who specializes in threatened and endangered reptiles and amphibians in the Central Valley with specific emphasis on the Giant Garter Snake.

I have significant experience researching the Giant Garter Snake in Designed Field Research Projects

1 and Habitation Restoration Projects as well as
2 published peer-reviewed literature or research papers
3 on the Giant Garter Snake.

4 MS. WEHR: Thank you.

5 Is Exhibit GWD-9 a true and correct copy of
6 your testimony?

7 WITNESS HANSEN: Yes, it is.

8 MS. WEHR: Is GWD-12 a true and correct copy
9 of the U.S. Fish and Wildlife Service's 2012 five-year
10 review for the Giant Garter Snake?

11 WITNESS HANSEN: Yes, it is.

12 MS. WEHR: Is Exhibit GWD-13 a true and
13 correct copy of the U.S. Fish and Wildlife Service's
14 Giant Garter Snake Recovery Plan from 2017?

15 WITNESS HANSEN: Yes.

16 MS. WEHR: Thank you.

17 Will you be using a PowerPoint presentation to
18 assist in your testimony today?

19 WITNESS HANSEN: Yes, I will.

20 MS. WEHR: And is Exhibit GWD-11 a true and
21 correct copy of that presentation?

22 WITNESS HANSEN: Yes, it is.

23 MS. WEHR: Thank you.

24 If you could, please, Mr. Hunt, pull up
25 PowerPoint GWD-11.

1 I'll turn it over to you, Mr. Hansen.

2 (Exhibit displayed on screen.)

3 WITNESS HANSEN: My name is Eric Hansen. I'm
4 a professional wildlife biologist and expert in wetland
5 and reptile amphibian species, including special status
6 species such as the California Tiger Salamander, Giant
7 Garter Snake, and Western Pond Turtle, which are shown
8 on this slide from left to right.

9 I am providing a summary of my written
10 testimony and will discuss my opinions regarding the
11 importance of reliable water supplies delivered from
12 the Delta to Wildlife Refuges and the associated
13 effects on wetland waterfowl species in the San Joaquin
14 Valley.

15 Slide 2, please.

16 (Exhibit displayed on screen.)

17 WITNESS HANSEN: So I will focus on the Giant
18 Garter Snake because of its threatened status and the
19 critical importance of the population that inhabits the
20 San Joaquin Valley Wildlife Refuges.

21 Giant Garter Snake is representative of many
22 wetland-dependent species and is a top predator, also
23 is a sentinel for the health of the aquatic ecosystems
24 upon which they depend.

25 The Giant Garter Snake is precinctive to the

1 Central Valley, meaning that it is native to and is
2 only found in the Central Valley.

3 The green that you see on the map on the slide
4 represents the historic extent of the once-expansive
5 tule marshes in the Central Valley, about 95 percent of
6 which have been lost over the past 200 years.

7 The yellow dots that you see on the map that
8 are outlined in black represent observations of Giant
9 Garter Snakes from the State's Biodiversity Database.
10 So these dots include historic records, many of which
11 indicate areas, such as Tulare, where the species is
12 now locally extinct. So those are those dots all the
13 way to the bottom.

14 The Grassland's Ecological Area in Merced
15 County contains the last-known breeding population of
16 the Giant Garter Snake in the San Joaquin Valley,
17 located in the State Volta Wildlife Area and the
18 Grassland Water District.

19 This population is repre -- represented by two
20 unique genetic clusters. Together with the State's
21 Mendota Wildlife Area in Fresno County, which is marked
22 on the map, these Refuges house the last-known
23 populations of Giant Garter Snake in the San Joaquin
24 Valley, representing the last-known Giant Garter Snakes
25 in the southern extent of the specie's range, which

1 once spanned southward to Kern County.

2 All these areas depend on Central Valley
3 Project water moved south from the Delta by the U.S.
4 Bureau of Reclamation.

5 Slide 3, please.

6 (Exhibit displayed on screen.)

7 WITNESS HANSEN: In 2017, the U.S. Fish and
8 Wildlife Service issued a Final Recovery Plan for the
9 Giant Garter Snake which outlines objectives that must
10 be met in order to remove the snake from the Endangered
11 Species List.

12 To do this, the Plan establishes Recovery
13 Units comprising wetland habitat reserves, 12 of which
14 are called for in the San Joaquin Valley.

15 The Giant Garter Snake requires water for
16 breeding and feeding from March through November.
17 Water reliability is, therefore, a key component of the
18 Recovery Plan.

19 Annual water delivery requirements will be
20 identified for these new Giant Garter Snake reserves as
21 they are developed with a focus on improving the water
22 supply and the reserves that will be located in the
23 Grasslands Ecological Area.

24 The Fish and Wildlife Service will then work
25 with the Bureau of Reclamation and other agencies,

1 including the State Water Resources Control Board, to
2 supply these areas and those with known populations of
3 Giant Garter Snake with sufficient clean water to
4 maintain necessary aquatic habitat.

5 Following that, a 20-year monitoring period
6 will ensue which must include one- and three-year
7 drought to ensure that Giant Garter Snakes are no
8 longer threatened by insufficient water supply.

9 Slide 4, please.

10 (Exhibit displayed on screen.)

11 WITNESS HANSEN: Wetland-dependent species in
12 the San Joaquin Valley have suffered an extensive
13 reduction in their abundance and distribution compared
14 to historical times.

15 Giant Garter Snake Recovery Plan is focused on
16 Recovery Units that will restore ecosystems. All 14
17 Wildlife Refuges that receive water from the Delta are
18 within these Recovery Units.

19 The U.S. Fish and Wildlife Service has
20 identified the Refuges as the most important remaining
21 strongholds for the Giant Garter Snake in the
22 San Joaquin Valley because they mark the southernmost
23 currently known occurrence of Giant Garter Snakes.

24 Slide 5, please.

25 (Exhibit displayed on screen.)

1 WITNESS HANSEN: Water delivered from the
2 Central Valley Project accomplishes three things:

3 First, it provides aquatic habitat during the
4 snake's active season. Giant Garter Snakes are active
5 in the spring, summer and early fall. They breed in
6 March and April and give birth from July to September.
7 Providing fresh water from the Delta to the Refuges
8 during these months allow the snakes to move across the
9 landscape, find mates, and successfully breed.

10 Second, CVP water promotes the growth of
11 wetland vegetation which allows the snakes to escape
12 predator -- predators and forge for food.

13 And, finally, the delivered water produces the
14 small fish, tadpoles, and frogs on which Giant Garter
15 Snakes feed. As a result of water deliveries, the
16 Giant Garter Snake and other wildlife species are
17 improved in their health, have lower mortality,
18 increased reproduction, and better genetic diversity.

19 It's my opinion that the reliable delivery of
20 water from the Delta to CVP Refuges is the primary
21 driver that is preventing extirpation of the Giant
22 Garter Snake in the San Joaquin Valley.

23 Reliable and timely water deliveries are
24 critical to the survival of the species in this portion
25 of its range and for the survival of similar species of

1 concern, such as the Tiger Salamander and Western Pond
2 Turtle.

3 Slide 6, please.

4 (Exhibit displayed on screen.)

5 WITNESS HANSEN: It is my opinion that if
6 WaterFix Project is operated in a way that would
7 decrease the volume, timing or reliability of CVP water
8 delivered to the Refuges, this would cause significant
9 adverse effects on wildlife. The recent drought
10 provided an example of these kinds of impacts.

11 In 2014 and 2015, the Bureau of Reclamation
12 reduced Level 2 Refuge water deliveries from the Delta
13 and restricted the schedule of Refuge water deliveries.

14 Wetland plant production decreased and very
15 little aquatic habitat was available during the active
16 period of the Giant Garter Snake during this time.
17 Essential aquatic habitat and aquatic prey were
18 eliminated.

19 I conducted surveys for specific populations
20 of Giant Garter Snakes in the northern Grasslands
21 Ecological Area during this time. Snakes that I had
22 observed there in previous years were not detected and
23 prey species also were not detected or were detected in
24 very low numbers.

25 The snakes remain in Volta Wildlife Area.

1 Those formerly present in wetlands downstream were not
2 detected.

3 An extirpation of such populations could
4 constitute a permanent loss of approximately half of
5 the known genetic diversity of Giant Garter Snakes in
6 the area. Loss of genetic diversity reduces the
7 species' ability to adapt to changing conditions and to
8 withstand -- withstand stressors such as disease.

9 Water is the cornerstone of the strategy for
10 conserving this species. It's my opinion that unless
11 the priority of CVP Refuge water supplies and water
12 delivery schedules are upheld in the future, there will
13 be habitat decline and significant wildlife impacts
14 caused by the reduced aquatic habitat, lack of emergent
15 wetland vegetative cover, and reduced food supply.

16 Adverse impacts would include depressed
17 breeding rates, increased predation and depleted
18 health, which would decrease survival and reproductive
19 rates and genetic diversity.

20 I, additionally, believe that if Refuge water
21 supplies are deprioritized or reduced, there's a
22 likelihood that the remaining naturally occurring
23 populations of Giant Garter Snake in the Grasslands
24 Ecological Area and Volta Wildlife Area would be
25 permanently extirpated.

1 Again, this area hosts the most significant
2 populations in the San Joaquin and Tulare Basins.

3 That concludes my testimony.

4 Thank you.

5 MS. WEHR: Thank you.

6 CO-HEARING OFFICER DODUC: Thank you.

7 I have lost my notes from yesterday. If you
8 would indulge me, those who would like to conduct
9 cross-examination of this panel, please come up and
10 once again identify yourselves by group number and give
11 me a time estimate, please.

12 I do remember that DWR and the State Water
13 Contractors are doing a joint cross-examination for
14 about 30 minutes?

15 MS. MORRIS: Perfect.

16 MR. STROSHANE: Tim Stroshane, Restore the
17 Delta.

18 Approximately 30 minutes.

19 CO-HEARING OFFICER DODUC: Group Number?

20 Oh, Tim's walking away.

21 MR. JACKSON: I believe that 32 is his number.

22 CO-HEARING OFFICER DODUC: 32, thank you.

23 MR. JACKSON: Mike Jackson on behalf of
24 AquAlliance, CSPA and C-WIN.

25 About 20 minutes, I would think.

1 CO-HEARING OFFICER DODUC: Group Number?

2 MR. JACKSON: 31.

3 CO-HEARING OFFICER DODUC: Thank you.

4 I haven't memorized all your group numbers
5 yet.

6 MR. JACKSON: Okay.

7 MS. MESERVE: Osha Meserve for Group
8 Number 47, Friends of Stone Lakes National Wildlife
9 Refuge.

10 I will have about 30 minutes.

11 CO-HEARING OFFICER DODUC: Anyone else?

12 All right. I will ask Miss Morris and
13 Miss Cavanaugh -- welcome -- to come up and conduct
14 your cross-examination.

15 MS. MORRIS: Good morning.

16 I have a couple questions for Mr. Hansen, and
17 I'm going to jump around a bit.

18 But the majority of my questions are for
19 Mr. Ortega. And the categories are regarding Refuge
20 water delivery contracts and claims regarding
21 California WaterFix causing a reprioritization of
22 water.

23 CROSS-EXAMINATION BY

24 MS. MORRIS: I'll start with Mr. Hansen.

25 In your testimony on Page 6, Lines 14 to 16 --

1 GWD-9 is the exhibit number -- your opinion for
2 potential harm is based on a, quote, potential for USBR
3 to reprioritize water; correct?

4 WITNESS HANSEN: Correct.

5 MS. MORRIS: And are you familiar with the
6 Water Supply Contracts for Grasslands Water District?

7 WITNESS HANSEN: Only vaguely. That's not my
8 specialty.

9 MS. MORRIS: Okay. So, would it be better for
10 me to direct those questions to Mr. Ortega?

11 WITNESS HANSEN: Yes, it would.

12 MS. MORRIS: Okay. But I do have to ask you,
13 unfortunately, because it's in your testimony in two
14 different spots:

15 What did you mean by repriorization (sic) --
16 preprioritation (sic) -- reprioritizing water?

17 Thank you.

18 WITNESS HANSEN: What I am suggesting is that
19 if there is a change in the priority of deliveries that
20 results in diminished water in the Grasslands during
21 the critical spring, summer and fall months, that there
22 may be negative impacts on the wetland-dependent
23 species that I described in my testimony.

24 MS. MORRIS: Okay. So, by re -- by suggesting
25 a potential for reprioritizing water, it's really a

1 potential reduction in water --

2 WITNESS HANSEN: That's --

3 MS. MORRIS: -- correct?

4 WITNESS HANSEN: -- correct, yes.

5 MS. MORRIS: Okay. Thank you.

6 Mr. Ortega, is it true that the Bureau
7 provides water to Grasslands Water District based on a
8 long-term water supply contract?

9 WITNESS ORTEGA: Yes.

10 MS. MORRIS: And isn't it true that the Refuge
11 water is one of the highest South-of-Delta priorities
12 and similar to the San Joaquin River Exchange
13 Contractor priority?

14 WITNESS ORTEGA: Yes. And from an allocation
15 percentage respective. Grossly different volumes of
16 water.

17 MS. MORRIS: Thank you for that clarification.

18 And is Grassland's assertion in both
19 Mr. Hansen's testimony and Dr. Petrie's testimony at
20 GWD-9, Page 6, Lines 14 through 16, and GWD-1, Page 16,
21 6 through 9, and 19 through 20, regard -- Is their
22 assertion regarding reprioritization based on this
23 priority that you just testified to?

24 WITNESS ORTEGA: You know, I'm not versed with
25 the -- those specific sections.

1 Can we -- Can we walk through that?

2 MS. MORRIS: Sure.

3 WITNESS ORTEGA: What was the first again?

4 (Exhibit displayed on screen.)

5 MS. MORRIS: Is this -- Okay. This is GWD-9,
6 Page 6, Lines 14 through 16.

7 And then, also, if you want to take a look at
8 Page 7 of the same exhibit, starting at Line 17.

9 (Exhibit displayed on screen.)

10 MS. MORRIS: I'm trying not to read large
11 pieces into the record, just let you review it.

12 CO-HEARING OFFICER DODUC: Setting a fine
13 example, Ms. Morris.

14 MS. MORRIS: And then let's look at GWD-1,
15 Page 6, Line 6 through 9.

16 (Exhibit displayed on screen.)

17 MS. MORRIS: Do you see that?

18 WITNESS ORTEGA: Yes.

19 MS. MORRIS: Okay. And then, also, on that
20 same page, Lines 19 through 20.

21 (Exhibit displayed on screen.)

22 MS. MORRIS: It's -- You'll -- You can see the
23 language is nearly identical --

24 WITNESS ORTEGA: Right.

25 MS. MORRIS: -- to previous sections from

1 Mr. Hansen's testimony; correct?

2 WITNESS ORTEGA: Correct.

3 MS. MORRIS: Okay. And then, finally, on that
4 same exhibit, Line -- Page 7, Lines 3 to 4.

5 (Exhibit displayed on screen.)

6 MS. MORRIS: Okay. So, again, now let me
7 repeat the question now that you have those sections in
8 mind.

9 WITNESS ORTEGA: Thank you.

10 MS. MORRIS: So you had just testified that
11 there -- that the priority -- although the water
12 amounts are significantly different -- for the
13 Grasslands is sort of similar to the San Joaquin
14 Exchange River Contractor priority; correct?

15 WITNESS ORTEGA: Correct.

16 MS. MORRIS: And so my question is: In light
17 of looking at GWD-9 and GWD-1 in the sections we just
18 went through, that water reprioritization was based on
19 this higher priority you testified to.

20 WITNESS ORTEGA: Correct.

21 MS. MORRIS: Isn't it also true that U.S.
22 Department of Interior has confirmed in writing that
23 the Department believes -- and that being the
24 Department of Interior -- believes that CVPIA is clear
25 in its mandate that the Department provide Level 2

1 water to CVPIA-designated Refuge areas?

2 WITNESS ORTEGA: Correct.

3 MS. MORRIS: Is it your opinion that USBR can
4 reprioritize water deliveries or change legal
5 obligations through an Operations Plan?

6 WITNESS ORTEGA: Yes.

7 MS. MORRIS: It is your opinion they can
8 change their legal obligations under CVPIA --

9 MS. WEHR: Objection --

10 MS. MORRIS: -- through an Operations Plan?

11 MS. WEHR: -- calls for a legal conclusion.

12 CO-HEARING OFFICER DODUC: Are you asking him
13 for his opinion as the General Manager of Grassland
14 Water District?

15 MS. WEHR: I am.

16 And I'm also asking on the basis that both of
17 the other witnesses -- based on his understanding of
18 the contract -- have testified about reprioritization
19 under the contracts.

20 CO-HEARING OFFICER DODUC: Overruled.

21 WITNESS ORTEGA: I believe that it is within
22 Reclamation's capacity to not deliver the full Refuge
23 water supply as exhibited in '14 and '15.

24 We've got a long-standing unmet 25-year-old
25 mandate. We're still not receiving the water supplies

1 that we need. So the -- Ignoring the law is -- is the
2 norm.

3 MS. MORRIS: Okay. So let's break that down
4 because the contracts allow for some reduction in
5 delivery.

6 WITNESS ORTEGA: Up to 25 percent.

7 MS. MORRIS: Okay.

8 WITNESS ORTEGA: Yeah. And in '14 and '15, we
9 live -- we received less than half of our normal supply
10 and less than 30 percent of our contracts.

11 MS. MORRIS: Okay. But you agree, again, that
12 that was under existing conditions and has nothing to
13 do with California WaterFix; correct?

14 WITNESS ORTEGA: Correct.

15 MS. MORRIS: Okay. And then let's look at --
16 If you want to. I have to questions but we can pull up
17 GWD-21 --

18 (Exhibit displayed on screen.)

19 MS. MORRIS: -- which is a letter --
20 September 15th, 2017, letter from David Murillo to --
21 addressed to you regarding the CWF participation
22 approach.

23 Isn't it true that DWR (sic) in this letter
24 committed to meeting CVP -- CVPIA obligations?

25 WITNESS ORTEGA: I think you mean the Bureau

1 of Reclamation.

2 MS. MORRIS: Yes. I'm sorry. Thank you.

3 WITNESS ORTEGA: Yes.

4 MS. MORRIS: And then if we could just look at
5 that page, same exhibit, GWD-21 at Page 4.

6 While they're pulling that up, I had a quick
7 cleanup question.

8 (Exhibit displayed on screen.)

9 MS. MORRIS: Or I'll wait till the end. It's
10 a very quick one.

11 Okay. Do you see the top -- the top two --
12 I'm sorry -- the last two bullets on the top of the
13 page?

14 So, in addition to Reclamation saying it would
15 continue to meet the CVPIA, didn't they also commit to
16 (reading):

17 "Operation of the CWF and use
18 of . . . capacity of the CWF by
19 participating CVP Contractors would
20 neither negatively impact
21 non-participating CVP Contractors nor
22 Reclamation's ability to meet existing
23 legal obligations."

24 WITNESS ORTEGA: They made that statement but
25 didn't identify how they would go about that and

1 identify the need for mitigation measures to be in
2 place.

3 MS. MORRIS: But they made the commitment in
4 this written letter to you on September -- in September
5 of 2017; correct?

6 WITNESS ORTEGA: Correct.

7 MS. MORRIS: And then I just want to take a
8 look at -- Let's do that cleanup thing really fast.

9 If you could pull up GWD-16, which is your
10 PowerPoint, and looking at Slide 5.

11 (Exhibit displayed on screen.)

12 MS. MORRIS: This slide says that the
13 (reading):

14 "Grasslands Ecological Area
15 contributes approximately 57 million
16 annually to the local economy."

17 WITNESS ORTEGA: Um-hmm.

18 MS. MORRIS: I could have misread correctly,
19 but I thought, when you were orally speaking to this
20 slide, you said 47 million.

21 WITNESS ORTEGA: No. If I -- If I misspoke,
22 it's 57 million.

23 MS. MORRIS: Okay.

24 WITNESS ORTEGA: It was based on a demographic
25 study that we conducted in 2003.

1 MS. MORRIS: Okay. Great. Thank you.

2 WITNESS ORTEGA: Um-hmm.

3 MS. MORRIS: And then if you could pull up,
4 please, DWR-1028, Slide 50.

5 And before you go to Slide 50, if you could
6 show the witness the cover page, please.

7 (Exhibit displayed on screen.)

8 MS. MORRIS: This is the PowerPoint that Erik
9 Reyes from DWR represented, and it shows the CalSim
10 modeling results.

11 WITNESS ORTEGA: (Nodding head.)

12 MS. MORRIS: Page 50, please.

13 (Exhibit displayed on screen.)

14 MS. MORRIS: And do you see on this slide this
15 shows for -- the modeling for all of the different
16 variety of alternatives and the black is shown in the
17 No-Action Alternative for CVP South-of-Delta Refuge
18 deliveries.

19 Do you see that?

20 WITNESS ORTEGA: Yes.

21 MS. MORRIS: And isn't it true that this graph
22 in the modeling that has been presented show almost
23 identical deliveries under the No-Action and every
24 single alternative?

25 WITNESS ORTEGA: Yes.

1 MS. MORRIS: Okay. And I just have a -- Let
2 me just, while we have this slide up.

3 Mr. Hansen, can you confirm also that the
4 modeling results shown here show that all of the
5 alternatives compared to the No-Action Alternative show
6 substantially similar water deliveries to
7 South-of-Delta Refuges?

8 WITNESS HANSEN: Yes. Yes.

9 MS. MORRIS: Thank you.

10 Isn't it true that in Part 1, Mr. Munévar, a
11 witness for DWR, also testified and confirmed that the
12 modeling would show no changes in water deliveries to
13 the Refuges?

14 WITNESS ORTEGA: Yes.

15 MS. MORRIS: Isn't it true, in addition to
16 that, that Mr. Ron Milligan, testifying on behalf of
17 the Bureau of Reclamation, testified that, in 2015, if
18 CWF had been in place, that the amount of water to the
19 Refuges potentially would have been increased?

20 WITNESS ORTEGA: Yes, under the -- the
21 condition that Reclamation could utilize those
22 facilities, which would require their financial
23 investment.

24 MS. MORRIS: Thank you.

25 I don't have any further questions.

1 CO-HEARING OFFICER DODUC: Miss Cavanaugh?

2 MS. CAVANAUGH: No questions, Your Honor.

3 CO-HEARING OFFICER DODUC: All right. Thank
4 you.

5 Mr. Jackson, you're up. And mr. Jackson has
6 requested 20 minutes.

7 CROSS-EXAMINATION BY

8 MR. JACKSON: Mr. Ortega, you indicated in --
9 in your testimony that your worry about sort of
10 repurposing the water is based upon 2014 and 2015; is
11 that correct?

12 WITNESS ORTEGA: No. I think it's the --
13 the -- the entire 25-year period that Reclamation has
14 failed to deliver the water supply obligated by
15 Congress. So not just 2014 and '15.

16 MR. JACKSON: All right. Would you sort of
17 recount what you mean by "the 25-year period."

18 WITNESS ORTEGA: Sure.

19 MR. JACKSON: And -- And your experience
20 within that -- The experience of the District within
21 that period.

22 WITNESS ORTEGA: Sure.

23 So I've -- I've been the General Manager for a
24 little over six years now.

25 We -- We have reached full delivery of Refuge

1 water supply but only to the Refuges that can
2 physically receive that water supply, where the
3 conveyance is actually in place.

4 The -- It's -- It's been a chronic problem to
5 deliver water to the Refuges on a schedule that the
6 habitat requires.

7 And -- And we feel strongly that further
8 obstacles or -- or problems, including, you know,
9 the -- the future of the Delta and an increased
10 regulatory pressure to -- to inhibit exports will
11 further diminish their ability to -- to even deliver
12 what they've done today and -- and still falling short
13 of -- of this long-standing mandate of CVPIA 1992.

14 MR. JACKSON: So, since '92, has there been
15 any attempt to improve the delivery system that would
16 enable you to receive the water that CVPIA promised?

17 WITNESS ORTEGA: Funding has been the -- the
18 limitation on the Federal side.

19 So, I -- I spoke to the fact that Reclamation
20 acquires a third of our supply from willing sellers on
21 an annual basis. That consumes all of the Refuge
22 funding that's available by Congress through
23 appropriations, so there's been very little progress
24 made on completing the conveyance to deliver full
25 Level 4 to the Refuges.

1 MR. JACKSON: Does the CVPIA require that the
2 water be acquired from willing sellers?

3 WITNESS ORTEGA: It does.

4 MR. JACKSON: And, in that regard, there are
5 Wildlife Refuges north of the Delta; is that correct?

6 WITNESS ORTEGA: There are Wildlife Refuges
7 north of the Delta.

8 MR. JACKSON: Do you receive the same amount
9 of water that they do in a given year?

10 WITNESS ORTEGA: Not all Refuges are created
11 equal. So each of them have independent contracts, so
12 it really is on a case-by-case basis.

13 For example, the Kern National Wildlife
14 Refuge, two-thirds of its supply is Incremental
15 Level 4, so two-thirds actually has to be acquired from
16 willing services, as well as there are some Federal
17 Refuges, including most north of the Delta, that the
18 whole of their water supply is actually Level 2, so
19 it's delivered on a much more reliable basis.

20 So our concerns are with really the 14 Refuges
21 that are located south of the Delta that -- that have a
22 large component of their supply that's dependent on
23 acquisition from willing sellers.

24 MR. JACKSON: Do you have a recommendation, if
25 the Cal WaterFix is approved, of how Permit conditions

1 could be altered to give you the level of protection
2 that CVPIA requires?

3 WITNESS ORTEGA: So the -- the . . . The
4 Proposed Project and the modeling of CalSim II included
5 the delivery of -- of Level 2 supplies. So, you know,
6 I think that that's -- that's a -- a huge component of
7 it.

8 But there's -- there's more detail. It's --
9 It's the how. So there's -- there's other implications
10 as it relates to our ability to carry over water in
11 San Luis Reservoir. So giving a higher rescheduling
12 priority over irrigation water would be one factor,
13 ensuring that the Level 2 is, in fact, delivered on
14 a -- on a priority basis.

15 So -- So, yes, I -- I do think that there are
16 a number of -- of mitigation measures that could be in
17 place as a part of this permitting process that would
18 further assist Reclamation and -- and the State of
19 California, frankly. The State is also on the hook for
20 delivering these supplies.

21 MR. JACKSON: Does Grasslands intend to
22 present to the State Water Resource Control Board
23 conditions for the Permit that would allow the CVPIA
24 guarantee to -- to be actually delivered?

25 WITNESS ORTEGA: Yes, we could provide some

1 mitigation measures.

2 MR. JACKSON: Thank you, sir.

3 Mr. Hansen, your testimony was about the
4 Recovery -- one of the things was about the Recovery
5 Plan --

6 WITNESS HANSEN: (Nodding head.)

7 MR. JACKSON: -- for the Giant Garter Snake.

8 WITNESS HANSEN: Yes.

9 MR. JACKSON: Does that Recovery Plan cover
10 the Sacramento Valley as well?

11 WITNESS HANSEN: Yes, it does.

12 MR. JACKSON: Is there any difference
13 between -- in terms of what the Giant Garter Snake
14 needs south of the Delta from what it needs north of
15 the Delta?

16 WITNESS HANSEN: Needs are not different;
17 circumstances are.

18 MR. JACKSON: All right. Would you describe
19 the difference in the circumstances.

20 WITNESS HANSEN: Water is provided during
21 spring and summer in the Sacramento Valley by the
22 abundant rice agriculture that's present. We do not
23 have that type of available surface water driven by
24 agriculture in the San Joaquin Valley, not in terms of
25 the proportion of acreage that we had decades past.

1 MR. JACKSON: Calling your attention to your
2 statement about decades back.

3 What was the natural source of water that the
4 Giant Garter Snake developed with and that your wetland
5 complex was watered by?

6 WITNESS HANSEN: Precipitation and floodwater.

7 MR. JACKSON: And the floodwater came from
8 where?

9 WITNESS HANSEN: It came from -- Depending on
10 which part of the valley, but typically the western
11 slope of the Sierra Nevada.

12 MR. JACKSON: And for the Grasslands area
13 itself, what river would that have been?

14 WITNESS HANSEN: We had San Joaquin River
15 would have been the primary driver.

16 MR. JACKSON: And that water disappeared when
17 Friant was closed; right?

18 WITNESS HANSEN: I believe so, yes.

19 MR. JACKSON: Is there any delivery into the
20 Grasslands through the natural -- the remaining natural
21 channels from the San Joaquin River?

22 WITNESS HANSEN: Not that I'm aware of, but
23 the delivery and the water infrastructure is not my
24 specialty.

25 MR. JACKSON: Mr. Ortega, do you have a -- do

1 you know whether or not physical's any water delivered
2 from the San Joaquin system into the Grasslands at this
3 time?

4 WITNESS ORTEGA: I think that's a different
5 question.

6 So, yes, floodwaters from the San Joaquin can
7 enter the Mendota Pool but then enter into agricultural
8 conveyance that is subsequently delivered into the
9 Grasslands. So it's a -- a mix of -- of natural
10 precipitation and, you know, infrastructure that has
11 been modernized.

12 MR. JACKSON: What's the ratio between what
13 comes from the Delta and what comes from the
14 San Joaquin River; do you know?

15 WITNESS ORTEGA: I wouldn't be able to speak
16 to specific ratio or -- or exact numbers. By and
17 large, most years, all of our supply is Delta-borne.

18 MR. JACKSON: In the natural system, as far as
19 you know, did any of the water come from the Delta?

20 WITNESS ORTEGA: No. It flows in the opposite
21 direction in our neighborhood.

22 MR. JACKSON: Right.

23 And, just for the record, the Friant Division
24 of the Central Valley Project is operated by the Bureau
25 of Reclamation; correct?

1 WITNESS ORTEGA: Correct.

2 MR. JACKSON: Mr. Hansen, what happened in
3 2014 and 2015 in terms of the Giant Garter Snake? And,
4 I assume that it's a -- an indicator species for the
5 Pond Turtle and -- and the -- the other -- the
6 Salamander?

7 WITNESS HANSEN: Correct. It is
8 representative of other wetland-dependent reptiles and
9 amphibians.

10 MR. JACKSON: Would you -- Would you describe
11 what happened in 2014 and 2015 in terms of those
12 species.

13 WITNESS HANSEN: Well, in simple terms, a
14 great deal of the landscape went dry during the spring
15 and summer months, eliminating prey and vegetative
16 cover and the habitat upon which those species depend.

17 So, while it's possible there are still
18 reptile individuals on the landscape, the numbers that
19 were detected prior to 2014-2015 were not present in --
20 during monitoring efforts conducted afterwards.

21 MR. JACKSON: What is the reproductive period
22 for a Giant Garter Snake?

23 WITNESS HANSEN: They usually breed in March
24 and April and will give birth from July into September.

25 MR. JACKSON: Are they a species that can

1 withstand years without reproduction?

2 WITNESS HANSEN: Years without reproduction,
3 yes. Years without food, no.

4 MR. JACKSON: All right. And so it's the food
5 web that is critical in terms of carrying a species
6 through a drought.

7 WITNESS HANSEN: Correct.

8 MR. JACKSON: And that's true both in --
9 within the full range of the Giant Garter Snake.

10 WITNESS HANSEN: Correct.

11 MR. JACKSON: It would -- They exist in the
12 Delta as well?

13 WITNESS HANSEN: They do.

14 MR. JACKSON: And they exist in the Sacramento
15 Valley.

16 WITNESS HANSEN: They do.

17 MR. JACKSON: And that was reflected in your
18 exhibit.

19 WITNESS HANSEN: Yes, it was.

20 MR. JACKSON: It's just a little dryer in
21 San Joaquin.

22 WITNESS HANSEN: It's substantially dryer.

23 MR. JACKSON: Okay. Mr. Ortega, you indicated
24 that, in 2014 and 2015, even though there was a CVP
25 requirement from the CVPIA for delivery of no less than

1 75 percent of the water --

2 Is that correct?

3 WITNESS ORTEGA: Correct.

4 MR. JACKSON: -- that you got less than half
5 of what the Federal law --

6 WITNESS ORTEGA: Correct.

7 MR. JACKSON: -- required.

8 WITNESS ORTEGA: Correct.

9 MR. JACKSON: Was there any other water that
10 you know of that was used in the area by people who had
11 lower priorities than you have?

12 WITNESS ORTEGA: Groundwater. But groundwater
13 in our -- our area is few and far between and the
14 quality isn't ideal, so it would -- What little
15 groundwater we could develop needed to be blended with
16 surface water in order to -- to operate that, but it's
17 not a replacement source by any means.

18 MR. JACKSON: What is the present . . .

19 Let me -- Let me rephrase.

20 Mr. Hansen, is water quality important to the
21 aquatic species that you are testifying about today?

22 WITNESS HANSEN: It is, yes.

23 MR. JACKSON: Was the water quality changed in
24 2014 and 2015 by the deliveries?

25 WITNESS HANSEN: That remains unclear.

1 MR. JACKSON: All right. How is water quality
2 important in the range of the Giant Garter Snake in
3 the -- in the Central Valley?

4 WITNESS HANSEN: It would be important for the
5 entirety of the food web, so not only supporting those
6 species lower on the food web that provide the food for
7 top predators like Giant Garter Snake, but also because
8 of reduction in analytes that can affect reproduction
9 need to be diluted.

10 So there are potential analytes such as
11 selenium, and boron and arsenic that can concentrate
12 when water isn't diluted adequately.

13 MR. JACKSON: Are those -- Is selenium and
14 boron and arsenic in the soil in -- in the area of the
15 Grasslands Water District?

16 WITNESS HANSEN: Yes, it is.

17 MR. JACKSON: And . . . does that mean that
18 the -- the key to diluting the existing arsenic, boron
19 and selenium is to get your full Level 2 deliveries?

20 WITNESS HANSEN: That would play a part. The
21 extent to which is not my expertise, so . . .

22 MR. JACKSON: All right. Now, Mr. Ortega, in
23 your testimony -- and I apologize for being a little
24 bit late because there isn't a parking garage within
25 the next -- within 20 blocks that's still open.

1 The . . . You made a statement that the
2 Bureau's ignoring the law is the norm in terms of water
3 deliveries to the Refuges?

4 WITNESS ORTEGA: (Nodding head.)

5 MR. JACKSON: Would you explain that to me.

6 WITNESS ORTEGA: Sure.

7 We have not -- They have not delivered the
8 required amounts under the Central Valley Project
9 Improvement Act to date.

10 MR. JACKSON: In any year?

11 WITNESS ORTEGA: In any year. In any year,
12 yes.

13 Primarily driven by the fact that some
14 Refuges -- five of the 19 Refuges still lack the
15 physical conveyance to receive their water supply.

16 MR. JACKSON: Is it . . . I assume it's
17 important to the Refuges to get their full water
18 supply.

19 WITNESS ORTEGA: A little.

20 MR. JACKSON: Correct?

21 WITNESS ORTEGA: Yes, yes. It's extremely
22 important --

23 MR. JACKSON: All right

24 WITNESS ORTEGA: -- to get --

25 MR. JACKSON: And --

1 WITNESS ORTEGA: -- the full water supply to
2 the Refuges.

3 MR. JACKSON: And insofar as the . . .
4 California WaterFix -- Hype -- Hypothetically, insofar
5 as the California WaterFix is only a State Water
6 Project facility, are you worried that that would
7 change the ability of the Bureau to -- to supply the
8 full allotment from the CVPIA to the Refuges south of
9 the Delta?

10 WITNESS ORTEGA: Without --

11 MS. WEHR: Objection: Calls for speculation.
12 I don't think it's been stated that --

13 MR. JACKSON: It's a hypothetical and I think
14 the evidence has been very clear that the Bureau is not
15 yet --

16 CO-HEARING OFFICER DODUC: Yes, Mr. Jackson.

17 Miss Wehr, overruled.

18 But if I might rephrase Mr. Jackson's
19 question.

20 Mr. Ortega, do you have an opinion on what
21 impacts might be to the Refuge if the California
22 WaterFix Project -- if the Bureau were not to
23 participate in the California WaterFix Project?

24 WITNESS ORTEGA: If the Bureau were not to
25 participate and was not able to utilize the facilities,

1 and without the proper mitigation measures to protect
2 the delivery of Refuge water supply, yes, it would have
3 a detriment to the Refuges.

4 MR. JACKSON: Thank you, sir.

5 No further questions.

6 CO-HEARING OFFICER DODUC: Thank you,
7 Mr. Jackson.

8 Mr. Stroshane, who has requested 30 minutes.

9 And we will take a break after Mr. Stroshane
10 is done.

11 MR. STROSHANE: My name's Tim Stroshane. I am
12 a policy analyst with Restore the Delta based in
13 Stockton.

14 And Mr. Jackson covered a number of my
15 questions, so I am hopeful that I do not stand as long
16 before the break.

17 My subjects are a -- a few questions about the
18 sources of water to the District; public trust
19 resources managed by the District's Refuges, and of the
20 Refuges south of the Delta; the 2014 Giant Garter Snake
21 Recovery Plan; a few questions that Mr. Jackson did not
22 cover.

23 And I think that pretty much -- I think I have
24 a . . . a few questions that relate to the discussion
25 of Permit conditions that are -- that were -- was

1 brought up in Mr. Hansen's testimony, and I want to go
2 into a few things about that with him.

3 That covers my subjects.

4 CROSS-EXAMINATION BY

5 MR. STROSHANE: My first question's for
6 Mr. Ortega.

7 Mr. Ortega, are you familiar with the
8 San Joaquin River Restoration Program?

9 WITNESS ORTEGA: Vaguely.

10 MR. STROSHANE: Are you aware that through
11 this program instream flows were reintroduced to a
12 portion of the San Joaquin River that went dry for
13 several decades between Mendota Pool and the
14 San Joaquin's confluence with the Merced River?

15 WITNESS ORTEGA: Yes.

16 MR. STROSHANE: As General Manager of
17 Grassland Water District, to the best of your
18 knowledge, do you know whether flows from this Program
19 benefit the Refuges that you manage?

20 MS. WEHR: Objection: Relevance to the
21 WaterFix Project.

22 MR. STROSHANE: This goes to sources of water
23 present, and as well as Mr. Jackson covered some past
24 sources of water to the District, natural sources he
25 was referring to, and this is an instream flow that

1 enters the San Joaquin River.

2 CO-HEARING OFFICER DODUC: Overruled.

3 WITNESS ORTEGA: Can you repeat the question.

4 MR. STROSHANE: Sure.

5 As General Manager of the District, to the
6 best of your knowledge, do you know whether flows from
7 this Program benefit the Refuges you manage for?

8 WITNESS ORTEGA: To date, they have not.

9 MR. STROSHANE: They have not.

10 Okay. New topic: Public trust resources.

11 Mr. Ortega, have you heard of the Public Trust
12 Doctrine?

13 WITNESS ORTEGA: Yes.

14 MR. STROSHANE: Have you heard of the term
15 "public trust resources"?

16 WITNESS ORTEGA: Yes.

17 MR. STROSHANE: Can you briefly state your
18 understanding of what such resources include.

19 WITNESS ORTEGA: From -- From a public trust
20 perspective, healthy landscapes, clean water, abundant
21 wildlife habitat, flood control, things of that nature.

22 MR. STROSHANE: Thank you.

23 Do you have a professional opinion or
24 understanding of whether the fish and wildlife
25 protected at the Refuges you manage are public trust

1 resources?

2 WITNESS ORTEGA: Yes, they are.

3 MR. STROSHANE: Are you aware that the State
4 Water Resource Control Board has a legal role in State
5 law to protect public trust resources?

6 WITNESS ORTEGA: Yes.

7 MR. STROSHANE: Are you aware that this same
8 Board can place conditions on water rights permits,
9 orders and decisions that it issues?

10 WITNESS ORTEGA: Yes.

11 MR. STROSHANE: Am I correct in understanding
12 your testimony that your District is concerned about
13 the potential for reduced Refuges -- Refuge water
14 supplies because, on one hand, DWR states that, by
15 operating the North Delta diversions more, South Delta
16 Pumping Plants including Jones would operate less and,
17 on the other hand, that the Bureau of Reclamation
18 continues to decline to participate financially in
19 the -- in the Petition Project?

20 WITNESS ORTEGA: Yes.

21 MR. STROSHANE: So I have that right.

22 WITNESS ORTEGA: You do.

23 MR. STROSHANE: Okay. Thank you.

24 Mr. Hunt, could you please bring up
25 Mr. Hansen's testimony, GWD-9, and go to Page 2.

1 And before we go further with that.

2 (Exhibit displayed on screen.)

3 MR. STROSHANE: Mr. Hansen, are you testifying
4 today as an expert witness?

5 WITNESS HANSEN: I am.

6 MR. STROSHANE: And can you briefly summarize
7 your contributions that you mentioned to the -- in --
8 in your testimony to the Giant Garter Snake Recovery
9 Plan of 2017.

10 WITNESS HANSEN: So, I served as a Recovery
11 Team member for both Sacramento and San Joaquin Valley
12 to assist with the development of the Recovery Plan.

13 MR. STROSHANE: And did you actually
14 participate in the drafting of language in -- in the
15 Plan?

16 WITNESS HANSEN: No. That's the
17 responsibility of the U.S. Fish and Wildlife Service.

18 MR. STROSHANE: Thank you for clarifying that.

19 Okay. Could you take us, Mr. Hunt, to Page 3,
20 and focus us on Lines 15 to 22.

21 (Exhibit displayed on screen.)

22 MR. STROSHANE: And these questions are now
23 for -- mainly for Mr. Hansen for the next few minutes.

24 In the Recovery Plan, do each of the Recovery
25 Units match up with -- or are they coterminous with

1 critical habitat for the Giant Garter Snake?

2 WITNESS HANSEN: There is no critical habitat
3 designated for Giant Garter Snake.

4 MR. STROSHANE: Okay. Thank you for
5 clarifying that.

6 Do you see in this passage that you mention
7 the (reading):

8 ". . . preserves of the San Joaquin Basin
9 Recovery Unit . . . in the Mendota
10 Wildlife Area . . . of the Tulare Basin
11 Recovery Unit."

12 And that they need (reading):

13 ". . . core aquatic habitat . . .
14 surrounding . . . wetland habitat,
15 and . . . aquatic corridors that connect
16 the preserves."

17 WITNESS HANSEN: Yes.

18 MR. STROSHANE: Am I correct that the
19 preserves are also referred to in the Recovery Plan as
20 block pairs?

21 WITNESS HANSEN: Yes.

22 MR. STROSHANE: And why are the preserves
23 defined this way in the Recovery Plan?

24 WITNESS HANSEN: Block pairs are designed to
25 provide insurance in the event that there are water

1 shortages in one versus the other, and they need to be
2 connected so that animals can move across the landscape
3 from one source of aquatic habitat to the next.

4 MR. STROSHANE: Okay. And am I correct that
5 the preserves are also referred -- Oh, I'm sorry.

6 Is the one-third mile distance of surrounding
7 buffer wetland habitat that is mentioned in your
8 testimony and in the Plan a minimum or a maximum
9 distance for that buffer?

10 WITNESS HANSEN: This distance is based on
11 known movement rates of Giant Garter Snakes at various
12 portions of its range and should be probably considered
13 an average, not either a minimum or a maximum.

14 MR. STROSHANE: Okay. Thank you.

15 And when you state in Line 20 of this passage
16 that there should also be a half mile aquatic corridor
17 connecting the preserves, is that a length for the
18 corridor between preserves or is it the width of a
19 corridor as it connects two preserves some other
20 distance apart from each other?

21 WITNESS HANSEN: Length may vary. Half mile
22 is intended to be the width, is my -- as I understand
23 the most recent iteration of the Plan.

24 MR. STROSHANE: Thank you for that
25 clarification.

1 Would these aquatic corridors have stream bank
2 lands associated with them?

3 WITNESS HANSEN: They could consist of stream
4 bank or they could consist of canal or channel bank. A
5 lot of these -- Especially in the Sacramento Valley, a
6 lot of this is based on water conveyance, irrigation
7 water conveyance. So this may be a trapezoidal channel
8 and the associated bank and upland.

9 MR. STROSHANE: Okay. Thank you.

10 Do you see in this same passage that you
11 stated your opinion that the majority of the preserves
12 in the Tulare Basin and San Joaquin Basin Recovery
13 Units will be located on Refuges that they receive --
14 that receive CVP water from the Delta?

15 WITNESS HANSEN: Yes.

16 MR. STROSHANE: By "Refuges" in your opinion,
17 do you mean Refuges as administrative units authorized
18 by the United States Congress, or are you referring to
19 Ecological Refuges or -- or refugia generally?

20 WITNESS HANSEN: Referring in this passage to
21 State and Federal lands set aside for the protection of
22 natural resources.

23 MR. STROSHANE: Okay. Thank you for
24 clarifying that.

25 Okay. Can we go, Mr. Hunt, to Page 4 --

1 (Exhibit displayed on screen.)

2 MR. STROSHANE: -- the passage for Line 4
3 through 7 -- I'm sorry -- 4 through 15.

4 (Exhibit displayed on screen.)

5 MR. STROSHANE: And, Mr. Hansen, do you see
6 that you state that (reading):

7 ". . . one of the recovery criteria . . .
8 in the . . . Recovery Units" -- is to
9 ensure that -- "known populations of
10 Giant Garter Snake are 'supplied with
11 sufficient clean water' . . ."

12 WITNESS HANSEN: Yes.

13 MR. STROSHANE: For management purposes, does
14 this mean that Refuge Water Managers have working
15 estimates of water requirements for known Giant Garter
16 Snake populations that they manage to?

17 WITNESS HANSEN: Specific to Giant Garter
18 Snake? I do not know.

19 MR. STROSHANE: Mr. Ortega, do you have some
20 idea about that?

21 WITNESS ORTEGA: Not a specific volume that
22 would be required to sustain them.

23 We do know that they require water in -- in
24 their active period and -- and we try and maximize the
25 water quality, and a lot of that is driven by surface

1 flows from the Delta.

2 MR. STROSHANE: Hmm. Okay.

3 And, Mr. Hansen, what is a known population?

4 How do you -- How do you define a "known population" of
5 the Garter Snake.

6 WITNESS HANSEN: A known population is an area
7 where monitoring has produced observations of the
8 animal.

9 And if these are considered populations and
10 not individuals, they consist of adults and young males
11 and females.

12 MR. STROSHANE: Okay. In terms of known Giant
13 Garter Snake populations, how would you describe the
14 populations of Giant Garter Snake that are to be
15 managed in the Delta Basin Recovery Unit?

16 WITNESS HANSEN: The Delta Basin, the extent
17 population that meets the criteria I just described
18 occurs on the Consumnes River Preserve.

19 MR. STROSHANE: Solely?

20 WITNESS HANSEN: Solely. And White Slough
21 Wildlife Area is another.

22 And then we have various scattered citings
23 throughout the Delta and various Delta waterways and
24 islands. The two populations would be White Slough
25 Wildlife Area and Consumnes River Preserve, the . . .

1 Consumnes River Ecological Reserve. That's the unit.

2 MR. STROSHANE: That sounds like that's the
3 main one.

4 WITNESS HANSEN: That is. That is the main
5 one, yes.

6 MR. STROSHANE: Okay. When you state in
7 Page 4 at line 10 through 13 of this passage that
8 securing adequate . . . supplies to meet the Giant
9 Garter Snake supply requirements would be a primary
10 activity of the 2017 Recovery Plan, do you or
11 Mr. Ortega have a quantified seasonal schedule for
12 obtaining such use -- and using such supplies?

13 This is a slightly different question than the
14 other quantify -- quantity question I was asking.

15 In other words, is there a schedule that you
16 apply based on -- that -- that's based on Giant Garter
17 Snake?

18 WITNESS HANSEN: If they were -- If you mean a
19 temporal schedule of water delivery, it would coincide
20 with the breeding, feeding and reproductive season that
21 I described that occurs between roughly April through
22 mid-October in any --

23 MR. STROSHANE: Okay.

24 WITNESS HANSEN: -- given year.

25 MR. STROSHANE: Yeah. Thank you.

1 Do you think -- Without getting into
2 quantities -- I'm not seeking a quantitative answer
3 here.

4 But do you think, in your professional
5 judgment, that unknown or uncertain populations of
6 Giant Garter Snake need greater or less water supplies
7 to facilitate recovery under the Giant Garter Snake
8 Recovery Plan?

9 MS. WEHR: Objection: Greater or less than
10 what?

11 MR. STROSHANE: Than the -- Than what they
12 might be getting now in their environment.

13 WITNESS HANSEN: Uncertain populations will
14 vary, depending on the population and depending on the
15 cause of the decline.

16 So there are other potential causes that are
17 not associated with water deliveries that may be
18 associated with declines. Water quality, for example,
19 may be an issue for some of these. That's a quality,
20 not a quantity, issue.

21 These areas will still be important because --
22 Well, the Recovery Plan prioritizes areas with known
23 populations of Giant Garter Snakes. But as new
24 populations are found, or if sites that are suitable
25 for reintroduction are found, they would need to

1 receive equal quantities of water required to meet
2 minimum habitat requirements for the species.

3 MR. STROSHANE: Is it potentially a priority,
4 or is it a priority, in the Re -- in the Recovery Plan
5 to identify locations of potential habitat where
6 additional water could be supplied --

7 WITNESS HANSEN: It is.

8 MR. STROSHANE: -- or should be supplied?

9 WITNESS HANSEN: It is. There is a --

10 MR. STROSHANE: Where are those places?

11 WITNESS HANSEN: Well, the San Joaquin Valley
12 is prioritized in terms of locating areas that would be
13 suitable for reintroduction, for example.

14 Those are areas where additional water, you'd
15 have to ameliorate the causes of former extirpations.
16 Returning water to the system would be one of those
17 factors that you would need to ameliorate.

18 MR. STROSHANE: Okay.

19 Okay. You covered boron and selenium with
20 Mr. Jackson for the Grassland area.

21 How do water quality concerns compare with --
22 How do those water quality concerns compare with water
23 quality concerns for Giant Garter Snake food supplies
24 in the Delta?

25 WITNESS HANSEN: In the Delta -- So, I will

1 begin by saying that we still have many unanswered
2 questions regarding the impacts of these variables on
3 health of Giant Garter Snake populations.

4 We can use avian species, aquatic waterfowl,
5 and studies that have been conducted of water -- with
6 waterfowl as a surrogate.

7 In the Delta, it would be similar to other
8 areas in the Sacramento Valley with mercury probably
9 being more of a concern coming down from the Sacramento
10 River.

11 Mercury is more of a concern North of Delta,
12 and things like selenium are more of a concern South of
13 Delta.

14 MR. STROSHANE: Um-hmm. Okay.

15 I want to come back now to current conditions
16 for California WaterFix, the Petition Project in this
17 proceeding.

18 And this section of questions are -- can be
19 for either Mr. Hansen or Mr. Ortega, but probably more
20 Mr. Hansen.

21 Can we go to Page 6, Section -- Lines 2
22 through 5 of Mr. Hansen's testimony.

23 (Exhibit displayed on screen.)

24 MR. STROSHANE: Do you see here you -- you
25 mentioned here, "Without appropriate" -- You testified

1 here that (reading):

2 "Without appropriate conditions put
3 in place to protect the quantity and
4 timing of Refuge water deliveries,
5 operations of the WaterFix . . . would
6 (sic) decrease the supply, timing and
7 reliability of water to CVPIA Refuges and
8 cause significant adverse effects on
9 wildlife."

10 Do you see that?

11 WITNESS HANSEN: I do.

12 MR. STROSHANE: Does the 2017 Giant Garter
13 Snake Recovery Plan have an implementation budget?

14 WITNESS HANSEN: It does, although I have not
15 had the opportunity to review the implementation
16 budget.

17 MR. STROSHANE: Mr. Ortega, are you familiar
18 with it? Have you studied --

19 WITNESS ORTEGA: I am not.

20 MR. STROSHANE: Okay. Do either of you know
21 what the implementation time horizon is for the
22 Recovery Plan?

23 WITNESS HANSEN: In the latest iteration,
24 so -- and I -- I would state that this has been -- the
25 original draft was in 1999, so there have been many

1 iterations --

2 MR. STROSHANE: Sure.

3 WITNESS HANSEN: -- and this latest was
4 released during my field season.

5 I have not reviewed it completely yet.

6 They look -- I believe it's a 20-year horizon
7 looking to begin -- optimistically and begin the
8 delisting process.

9 MR. STROSHANE: So we're looking at the
10 conclusion of that time horizon about 2037; correct?

11 WITNESS HANSEN: That would be correct.

12 MR. STROSHANE: Okay. Thank you.

13 To the best of your knowledge, either of you,
14 are all the Recovery Plan implementation costs
15 accounted for or defined and have committed funding?
16 To the best of your knowledge.

17 WITNESS HANSEN: Committed funding? No.
18 Defined now, yes, due to legal challenge after the
19 first iteration of -- of this particular final draft
20 was released.

21 It came without prices associated with the
22 action items, so the final version addressed those
23 concerns. So there are prices associated but not
24 funding committed.

25 MR. STROSHANE: Okay.

1 WITNESS HANSEN: It's unclear where the money
2 will come from.

3 MR. STROSHANE: I see.

4 And can -- can you briefly describe,
5 Mr. Hansen, what sorts of implementation costs that
6 lack funding at this time? To the best of your
7 knowledge.

8 WITNESS HANSEN: Most of them.

9 So, a great deal of this comes either via
10 mitigation funding; some of it comes from CVP through
11 the CVP -- the Habitat Recovery Program and the
12 Conservation Program administered by the U.S. Fish and
13 Wildlife Service and Bureau of Reclamation.

14 So there's habitat acquisition that is funded
15 there. But this is done not on a long-time horizon.
16 This is done now in two-year bites.

17 MR. STROSHANE: I see. Yeah.

18 I thank the witnesses for their time.

19 And no further questions.

20 CO-HEARING OFFICER DODUC: Thank you,
21 Mr. Stroshane. As always, thank you for your
22 efficiency and well-preparedness.

23 We will take our morning break and we will
24 return at 11:05.

25 (Recess taken at 10:49 a.m..)

1 (Proceedings resumed at 11:05 a.m.):

2 CO-HEARING OFFICER DODUC: It is 11:05. We
3 are back in session.

4 And we will now turn to Miss Meserve.

5 Mr. Stroshane is always a difficult act to
6 follow, but I have faith in you.

7 MS. MESERVE: Okay. Thank you.

8 Osha Meserve for Friends of Stone Lakes
9 National Wildlife Refuge.

10 I just have a few questions. I believe
11 they're -- they will all be for Mr. Hansen.

12 They have to do with the locations and habits
13 of the Giant Garter Snake; as well as the potential
14 impacts to the Garter Snake in the Project area; and
15 the effectiveness of mitigation.

16 CO-HEARING OFFICER DODUC: Okay. Thank you.

17 CROSS-EXAMINATION BY

18 MS. MESERVE: Mr. Hansen, your testimony
19 discusses that you're responsible for designing and
20 implementing field surveys and research on Giant Garter
21 Snake.

22 Are -- You're familiar with common threats to
23 the Garter Snake; is that correct?

24 WITNESS HANSEN: That's correct.

25 MS. MESERVE: And would those include changes

1 in land management practices?

2 WITNESS HANSEN: Absolutely.

3 MS. MESERVE: And would that include
4 urbanization?

5 WITNESS HANSEN: Yes.

6 MS. MESERVE: And other construction projects?

7 WITNESS HANSEN: Yes.

8 MS. MESERVE: Have you worked as a . . .
9 expert or consultant on construction projects and how
10 to avoid impacts to the Garter Snake?

11 WITNESS HANSEN: Yes, I have.

12 MS. MESERVE: What kinds of projects have you
13 worked on in -- in that arena?

14 WITNESS HANSEN: Water infrastructure and
15 delivery for CVP. That would be one Project.

16 The Gray -- Gray Lodge delivery project.
17 Water deliveries from Lake Oroville to Gray Lodge
18 through the Biggs-West Gridley Water District.

19 Interchange programs in the Thomas Basin, for
20 example; the 1990 Florida Interchange Project; gas
21 pipeline projects; development projects.

22 MS. MESERVE: A lot of projects --

23 WITNESS HANSEN: A lot of projects --

24 MS. MESERVE: -- it sounds like.

25 WITNESS HANSEN: -- over the last 20 years,

1 yes.

2 MS. MESERVE: And your testimony focuses on
3 Tulare Basin Recovery Unit and the San Joaquin Basin
4 Recovery Unit; is that correct?

5 WITNESS HANSEN: That's correct.

6 MS. MESERVE: Could we show Exhibit LAND-3,
7 which is in the -- not on the thumb drive but in the --
8 just to familiarize --

9 (Exhibit displayed on screen.)

10 MS. MESERVE: -- Mr. Hansen.

11 In addition to your work in the Grassland
12 Ecological Area that you discuss in your testimony --

13 If we could zoom out just a little bit.

14 (Exhibit displayed on screen.)

15 MS. MESERVE: -- have you studied the Giant
16 Garter Snake in the vicinity of the footprint of the
17 California WaterFix shown here? This is the northern
18 end of the footprint.

19 WITNESS HANSEN: Portions of it, yes.

20 MS. MESERVE: And this is within the -- what's
21 the Delta Basin Recovery Unit of the Recovery Plan you
22 referenced in your testimony --

23 WITNESS HANSEN: Yes.

24 MS. MESERVE: -- is that correct?

25 And what's your understanding of the presence

1 of GGS in the part of the Project area just shown in
2 this map, to begin with?

3 WITNESS HANSEN: There are scattered records
4 on the eastern fringe of the Delta, increasing records
5 in the West Delta.

6 But in the area that you're showing right now,
7 really the -- the principal localities are off the map.
8 You would have White Slough Wildlife Area, and you
9 would have Consumnes River Reserve -- Consumnes River
10 Ecological Reserve at -- it's roughly State Route 99
11 and Arnold Road.

12 MS. MESERVE: And are you aware that the Stone
13 Lakes National Wildlife Refuge Management Plan is
14 attempting to manage for increased Garter Snake.

15 WITNESS HANSEN: Yes.

16 MS. MESERVE: And have you assisted or
17 knowledgeable about any of those specifics?

18 WITNESS HANSEN: Specifics currently? No, I'm
19 not current in that process.

20 MS. MESERVE: And with respect to the
21 sightings you mentioned, is it your understanding that
22 there would definitely be a sighting if the GGS was
23 present in a particular area?

24 WITNESS HANSEN: No, that's not the case.
25 This animal makes a living at avoiding detection. Very

1 difficult animal to study.

2 MS. MESERVE: And -- And why is it so
3 difficult to detect?

4 WITNESS HANSEN: There are two things:

5 One, again, it's the animal's life history.
6 So cryptic coloration, avoiding predation and danger
7 and escape to water.

8 This is not an aggressive animal. This is a
9 shy animal that uses escape as its principal defense
10 from predation and danger.

11 The other reason is that the numbers have
12 diminished to the extent that the animals, even through
13 rigorous survey methods like intensive aquatic
14 trapping, can be very difficult to detect. We might be
15 happy with a 60 percent probability of detecting snakes
16 if they're present in low numbers using traditional
17 methods.

18 We're getting a little bit better now with
19 molecular methods, like environmental DNA, that we can
20 detect the animal's DNA in the environment, but these
21 are new emerging technologies that haven't been applied
22 broadly.

23 So, with more sensitive techniques like that,
24 I would be more confident in detecting an animal if it
25 was present on landscape than I would from visual

1 observations, visual encounter surveys, or trapping
2 surveys.

3 MS. MESERVE: And what's your opinion of the
4 CNDDDB database's usefulness with respect to detections?

5 WITNESS HANSEN: So, NDDB is a collection of
6 all records from the time the animal was identified.
7 So we have records in Merced County that go back to
8 1906, for example. So we have more than 100 years of
9 records. So these indicate places where animals have
10 been, not necessarily where the animals remain.

11 MS. MESERVE: And would the lack of a CNDDDB
12 dot on the map indicate to you that the animal
13 definitely wasn't present in a particular area?

14 WITNESS HANSEN: No. And that's one of the
15 unfortunate deficiencies of the NDDB. It does not --
16 It illustrates detections. It does not illustrate
17 sites for which surveys have failed to provide
18 detection, where surveys have occurred. That's the
19 piece that's missing.

20 MS. MESERVE: And -- And looking back at this
21 figure LAND-3, do you -- do you see to the east how Elk
22 Grove is sort of expanding westward toward the Delta?

23 WITNESS HANSEN: Yes.

24 MS. MESERVE: And then do you see how the
25 proposed North Delta diversions for the California

1 WaterFix Project sandwich the Refuge on the other side?

2 WITNESS HANSEN: Yes.

3 MS. MESERVE: Would you be concerned about, if
4 there were GGS in this area, that sandwiching effect
5 that's shown on the map? Or do you have a better way
6 to describe it?

7 WITNESS HANSEN: It would depend on what
8 remains of surface hydrology. So the snakes are going
9 to be moving through aquatic features on the land
10 surface.

11 So if the tunnels exist underground and
12 aquatic connectivity on the ground surface is
13 maintained, I would be less concerned.

14 I would be concerned about a temporary
15 disruption of connectivity between areas within the
16 green and the areas to the west, but that would be a
17 temporal impact, not necessarily a permanent impact.

18 So it would depend on how it was constructed
19 and -- and what the residual surface factors look like.

20 MS. MESERVE: Are you aware that the
21 construction period for the tunnels may be up to 14
22 years?

23 WITNESS HANSEN: Yes.

24 MS. MESERVE: And with respect to the Giant
25 Garter Snake, you've mentioned the temporal impact, but

1 is that a typical construction period, in your opinion
2 or --

3 WITNESS HANSEN: It is not.

4 MS. MESERVE: Would you have specific concerns
5 about the length of that construction period with
6 respect to GGS?

7 CO-HEARING OFFICER DODUC: Hold on,
8 Mr. Hansen.

9 Miss Morris.

10 MS. MESERVE: Thank you for acknowledging me.
11 Stefanie Morris, State Water Contractors.

12 I'd like to object to this line of
13 questioning: It calls for speculation.

14 This witness hasn't been provided to give this
15 kind of testimony. He's not familiar with the
16 construction impacts or of the -- His testimony at
17 least did not reach on it.

18 He has not laid any found -- The questioner
19 has not laid any foundation that he has looked at the
20 construction impacts in the location and the specici --
21 specificity or the timeframes for which the impacts
22 might occur in those locations and, therefore, he does
23 not have a basis to answer these questions.

24 CO-HEARING OFFICER DODUC: Miss Meserve, I
25 thought you did ask a few foundational questions.

1 MS. MESERVE: I certainly have more documents
2 that the witness can look at and -- regarding the
3 specific construction impacts, if that would be of
4 assistance.

5 CO-HEARING OFFICER DODUC: Let me try this.

6 First of all, Miss Morris, cross-examination
7 is allowed to go beyond the scope of a witness'
8 testimony as long as it is relevant to the key hearing
9 issues in Part 2.

10 I can't remember how many times I've said
11 that, so let's understand that.

12 Secondly, if I follow Miss Meserve's
13 questions, she did establish the foundation that
14 Mr. Hansen has general con -- familiarity with
15 construction projects, specifically construction
16 projects associated with CVP facilities.

17 But you did not necessarily, Miss Meserve,
18 establish his familiarity with this particular project
19 and the construction zone, I guess, of this project.

20 So why don't we do that.

21 MS. MESERVE: Okay.

22 If we could please go to SWRCB-107, which is
23 the Incidental Take Permit issued by --

24 (Exhibit displayed on screen.)

25 MS. MESERVE: And it's going to be

1 Attachment 6 to that, are the figures.

2 (Exhibit displayed on screen.)

3 MS. MESERVE: And if you scroll to Page 7
4 within that document --

5 (Exhibit displayed on screen.)

6 MS. MESERVE: -- and pan out a little bit.

7 (Exhibit displayed on screen.)

8 MS. MESERVE: This, Mr. Hansen, is the modeled
9 habitat relative to the tunnel's conveyance facilities
10 as depicted in the ITP.

11 For reference, the green intakes are shown in
12 the map. They're a little bit hard to see. And the
13 other features are shown in this sort of army green
14 color.

15 So that's the modeled habitat. And then it
16 shows, not that clearly as -- not as clearly as my
17 map -- how the Project lays down in that habitat.

18 CO-HEARING OFFICER DODUC: Hold on.

19 Do you have an objection, Miss Morris?

20 MS. MORRIS: I'm waiting until she finishes.

21 CO-HEARING OFFICER DODUC: All right. She's
22 just getting ready for you, Miss Meserve.

23 MS. MESERVE: Okay. All right.

24 Let's see. I was actually going to scroll
25 down to -- Page 11 shows a more specific example. If

1 you go down to what is 4.6-14 --

2 (Exhibit displayed on screen.)

3 MS. MESERVE: -- in this same document.

4 And this map shows the relationship of some
5 muck or reasonable tunnel mysterial -- material
6 storage, as well as the . . . other disturbances within
7 Zacharias Island.

8 Have -- Have you ever been to Zacharias
9 Island?

10 WITNESS HANSEN: Yes.

11 MS. MESERVE: Have you been there on GGS work?

12 WITNESS HANSEN: Yes, or in the vicinity.

13 MS. MESERVE: Uh-huh.

14 WITNESS HANSEN: So I -- I have done work for
15 California Department of Boating and Waterways on the
16 Water Hyacinth and Egeria Densa Control Programs,
17 evaluating Giant Garter Snake habitat in all navigable
18 waterways from Mendota Pool to the Port of Sacramento.

19 MS. MESERVE: And are you -- Well, from this
20 map, the way it's mapped by Fish and Wildlife, the
21 purple and red areas are what they say would be the
22 modeled habitat that would be potentially impacted.

23 CO-HEARING OFFICER DODUC: Purple and red?
24 Purple?

25 MS. MESERVE: Purple and red. So . . .

1 It's shown in the key, which is down below,
2 for reference.

3 (Exhibit displayed on screen.)

4 MS. MESERVE: Yeah.

5 There's a transmission line proposed to be
6 constructed across here, just as an example.

7 CO-HEARING OFFICER DODUC: Miss Morris.

8 MS. MORRIS: Thank you.

9 The witness has not testified that he's
10 familiar with this document, and there's no foundation.

11 I'd also like to note: I understand that
12 cross-examination can go beyond the scope. However,
13 what this cross-examiner is trying to do is elicit
14 expert testimony or expert witness testimony on a
15 Project that she has not laid a foundation that he has
16 analyzed.

17 And based on the witness -- the witness'
18 testimony, he has not said that he's worked on this
19 Project, and he should not be providing expert
20 testimony based on questions and maps he has not looked
21 at and is not familiar with.

22 WITNESS HANSEN: Would it help if I stated
23 that I have worked on this Project?

24 CO-HEARING OFFICER DODUC: Oh, thank you,
25 Mr. Hansen.

1 MS. MESERVE: Can you illuminate that a little
2 bit for us?

3 WITNESS HANSEN: The habitat that's modeled in
4 this figure is based on information that I provided. I
5 was part of the team that worked on the impacts
6 analysis for this Project when it was still being
7 referred to as the Bay-Delta Conservation Program

8 So, looking at these varying alignments for
9 the twin tunnels and modeling Giant Garter Snake and
10 other threatened and endangered reptile/amphibian
11 species within the Delta, and including design for
12 restored lands to mitigate for impacts, I was part of
13 the team that did all of that work.

14 Now, it's been some number of years since I
15 was involved in the Project.

16 MS. MESERVE: Certainly. And my -- And my
17 questions are more general. I was just trying to move
18 into a specific example, if that would help.

19 So, just looking at this example of
20 construction of a -- of a new transmission line,
21 assuming that entailed noise and vibration, are -- are
22 the GGS sensitive to noise and vibration?

23 WITNESS HANSEN: Sensitive to, but the extent
24 to which that affects individual health and day-to-day
25 activities is unknown.

1 MS. MESERVE: And is that something that is
2 under study by experts in GGS or --

3 WITNESS HANSEN: No. It remains unstudied.
4 Acoustical and vibration studies are unknown.

5 If they are habituated, and they are familiar
6 with frequent vibrations, then they can tolerate these.
7 It's short-term impacts. And typically human presence
8 that's going to affect distribution by the animal.

9 But Giant Garter Snakes commonly inhabit
10 railroad beds, for example, that have heavy freight
11 trains moving across them dozens of times a day without
12 having any long-term effect.

13 MS. MESERVE: So would it be correct that a --
14 a new disturbance might be more troubling to a Garter
15 Snake than something that was ongoing?

16 WITNESS HANSEN: Probably short-term as
17 opposed to long-term. So it would be construction that
18 would provide those impacts that may displace or affect
19 animals' day-to-day breeding and feeding behaviors, not
20 necessarily the long-term presence of the transmission
21 line.

22 MS. MESERVE: And assuming that, from your
23 work on -- on -- on this Tunnels Project, did you look
24 at all at the -- the traffic on the Delta roads and how
25 that increase might impact Garter Snake survival?

1 WITNESS HANSEN: In terms of modeling or
2 quantifying those potential impacts, no.

3 In terms of identifying increased traffic as a
4 potential contributor to increased mortality, or take,
5 under the Federal Endangered Species Act, yes.

6 MS. MESERVE: And is -- Are -- Is it common
7 for Garter -- the Giant Garter Snake to die on roads if
8 they're struck by cars? Is that a common --

9 WITNESS HANSEN: Yes, it is.

10 MS. MESERVE: -- problem?

11 So a large increase in traffic through a
12 modeled Garter Snake habitat would be of concern?

13 WITNESS HANSEN: It would be.

14 MS. MESERVE: And . . . Let's see.

15 Were you aware that the Tunnels Project
16 proposes to fill almost 600 acres of wetlands and
17 waters of the U.S.?

18 WITNESS HANSEN: I am aware that it's a large
19 number. I would not have been able to quote that
20 figure.

21 MS. MESERVE: And is the wet -- wetlands and
22 waters often also GGS habitat?

23 WITNESS HANSEN: Yes.

24 MS. MESERVE: Are you aware of a -- of a
25 wetland fill proposal in your work that you've ever

1 heard of that large?

2 WITNESS HANSEN: No.

3 MS. MESERVE: What's the largest wetland fill
4 project you've worked on?

5 WITNESS HANSEN: We would be talking in dozens
6 of acres, not at the scale that you're describing here.

7 MS. MESERVE: And in terms of habited --
8 habitat fragmentation, would wetland fill be as -- a
9 concern of yours?

10 WITNESS HANSEN: It would depend on other
11 factors. The simple answer would be yes, but it
12 depends on what other aquatic features remain on the
13 landscape.

14 MS. MESERVE: And as far as aquatic features
15 that provide habitat levels, so includes irrigation and
16 drainage canals in -- in the Delta; is that correct?

17 WITNESS HANSEN: That's correct.

18 MS. MESERVE: So it would be both natural and
19 man-made or man-maintained features?

20 WITNESS HANSEN: Yes.

21 MS. MESERVE: Could we -- Oops. If I can find
22 I put it.

23 Could we look at the exhibit from the thumb
24 drive FSL-50.

25 (Exhibit displayed on screen.)

1 MS. MESERVE: And this is a summary from the
2 Final EIR of the changes in modeled habitat associated
3 with the proposed Tunnels Project.

4 It's showing 667 acres of permanent habitat to
5 be impacted.

6 Have you ever worked on a project that
7 impacted that many acres of modeled GGS habitat?

8 WITNESS HANSEN: I have worked as the
9 Biological Monitor for the Natomas Basin Habitat
10 Conservation Plan. And I've gotten to witness aquatic
11 habitat by way of rice agriculture removed from the
12 landscape and the resulting impact on species.

13 And that is hundreds of acres, but that's
14 agriculture and not jurisdictional wetlands.

15 But that would be the only -- the only thing
16 comparable.

17 MS. MESERVE: And in addition to impacting
18 habitat, would these kinds of permanent impacts affect,
19 possibly, the food supply for the GGS?

20 WITNESS HANSEN: Yes.

21 MS. MESERVE: And what are the -- What do the
22 GGS eat?

23 WITNESS HANSEN: Fish and frogs, primarily.

24 MS. MESERVE: And -- And in thinking back to
25 the Recovery Plan and the Delta Unit of that.

1 And just from a level -- what you know about
2 the level of disturbance of this Tunnels Project, would
3 you be concerned about the ability to recover the
4 species in this unit, just looking at the Tunnels
5 Project alone as an impact?

6 WITNESS HANSEN: I believe that the tunnels
7 could have a significant effect on movement throughout
8 the system, but I will point out the distribution and
9 population dynamics of Giant Garter Snakes in the Delta
10 remain relatively unknown.

11 The Delta is a tidal system, and many of the
12 occurrences that are popping up are of Giant Garter
13 Snakes that have been run over by construction vehicles
14 associated with levee projects in the Delta. So the
15 snake is still demonstrating to us that it knows more
16 about what it needs than we do.

17 So there are still questions in the Delta, so
18 I really would be speculating as to the effect.

19 From a genetic standpoint, and what I do know
20 about population genetics, is that, yes, this has the
21 potential absolutely, depending on the alternative, to
22 dislocate individual populations of Giant Garter Snakes
23 and to affect the exchange of genes from one population
24 to the next, which is critically important for species
25 persistence.

1 MS. MESERVE: Just to ask about that a little
2 bit more.

3 Is it -- Are you saying it's important for
4 different geograph areas of --

5 WITNESS HANSEN: Yes.

6 MS. MESERVE: -- interrelate and then
7 interbreed?

8 Why is that?

9 WITNESS HANSEN: So, this species, what we
10 know about its population, biology or genetics,
11 indicates that it was probably panmictic, meaning that
12 the entire population from, say, Kern to Chico,
13 probably mixed during 250- or 500-year flood events,
14 that the valley served as a large mixing bowl.

15 We've since reclaimed wetlands in the Central
16 Valley. We've created levees. We've curtailed
17 flooding. So this flood-driven exchange for this
18 flood-adapted wetland species has been curtailed for
19 generation upon generation.

20 We now see evidence, even in some of our
21 largest remaining populations, of genetic bottlenecks
22 and population inbreeding depression, suggesting that
23 there has been little or no contact amongst these
24 populations. We -- The most parsimonious explanation
25 for that is flood control and Reclamation.

1 So it's very important, as I mentioned in my
2 verbal testimony, this genetic variation and
3 maintaining this variation and avoiding inbreeding is
4 important for adaptive purposes.

5 So these traits may be necessary to withstand
6 droughts or withstand diseases, things like that. So
7 loss of genetic variation in a population that's
8 already lost a tremendous amount is of vital concern.

9 MS. MESERVE: And you've -- you've mentioned a
10 few times the uncertainties around the -- the GGS.

11 Is there ongoing research now that is funded
12 to try to better understand the GGS and its behaviors?

13 WITNESS HANSEN: Yes. There -- So there --
14 The principal entity that works on Giant Garter Snake
15 from the government's side of things is the Biological
16 Resources Division of the U.S. Geological Survey, based
17 out of Dixon -- the Dixon Field Station. But they work
18 exclusively in the Sacramento Valley. They do not work
19 in the Delta; they do not work in the San Joaquin
20 Valley.

21 I am the other researcher.

22 MS. MESERVE: And are you aware of any Bureau
23 of Reclamation or DWR funding for this kind of
24 research?

25 WITNESS HANSEN: Yes.

1 Department of Water Resources was funding a
2 study through the USGS to examine the effects of water
3 transfers and fallowing on persistence of Giant Garter
4 Snake in the Sacramento Valley. That project has just
5 ended.

6 And there is also work, I believe, that is
7 funded by Reclamation for USGS to model patterns of
8 Giant Garter Snake occupancy in the Sacramento Valley
9 in support of permitting for water transfers from north
10 to south.

11 MS. MESERVE: And when you say that the -- the
12 first example you gave, that the funding, that it has
13 ended, has the research concluded, or what happened?

14 WITNESS HANSEN: Department of Water
15 Resources, to the best of my understanding, felt that
16 they had met their obligation to the resource agencies
17 and that their work challenges to the experimental
18 design that would make answering the question of
19 population level effects from fallowing very difficult
20 to achieve.

21 So you cannot control who grows rice, and when
22 and how large parcels are -- are managed over -- the
23 extent of -- that you would need. You would need 5 to
24 10 years for a study such as this. They can't receive
25 commitments for manipulating the landscape in that

1 time-scale.

2 So that's my understanding.

3 MS. MESERVE: As an expert on GGS, would --
4 would you prefer to see this research continue?

5 WITNESS HANSEN: I mean --

6 MS. MESERVE: Let's --

7 WITNESS HANSEN: -- carefully con -- I
8 would -- I would like to see the question addressed. I
9 would like to see research that addresses this
10 question.

11 MS. MESERVE: Adaptive management. Is that
12 something that you're familiar with in your work?

13 WITNESS HANSEN: Yes.

14 MS. MESERVE: And what -- How do you define
15 that term?

16 WITNESS HANSEN: You address management based
17 on new information as you learn more about the species
18 and the effects of management on that species.

19 Adaptive management for me is usually in the
20 context of managing preserves, mitigation banks,
21 habitats that have been created for the species.

22 MS. MESERVE: Would you agree that having good
23 information before undertaking a project would be
24 essential to effective adaptive management?

25 WITNESS HANSEN: Essential to the extent that

1 you need baseline information. You need to know what
2 existing conditions are before you can evaluate the
3 effects of the treatment, which could be either
4 experimental, it could be the result of the execution
5 of a project.

6 But having baseline conditions established is
7 very important for making that before and after
8 comparison.

9 MS. MESERVE: And, from your perspective,
10 establishing baseline conditions for Garter Snake,
11 would you agree, is the challenge?

12 WITNESS HANSEN: Yes.

13 MS. MESERVE: Would you think that, in terms
14 of the impact of the tunnels' construction on Giant
15 Garter Snake, that adaptive management should be used
16 once the pro -- Project construction began?

17 WITNESS HANSEN: So from the time it begins
18 to -- to adapt the protocols and procedures during
19 construction over the 14 years? Is that what you're --

20 MS. MESERVE: Yes.

21 WITNESS HANSEN: -- asking?

22 I would say yes, absolutely.

23 MS. MESERVE: Did you have a chance to advise
24 DWR, or whoever you were working for, regarding
25 adaptive management for GGS in your work?

1 WITNESS HANSEN: Adaptive management was not
2 discussed as part of the process I was involved in.

3 MS. MESERVE: No further questions.

4 CO-HEARING OFFICER DODUC: Thank you,
5 Miss Meserve.

6 Miss Morris.

7 MS. MORRIS: Thank you.

8 I'd like to request that the Hearing Officers
9 require Grasslands Water District to reproduce this
10 witness based on the fact that he's now provided
11 surprise expert witness testimony regarding the impacts
12 of California WaterFix based on his cross-examination.

13 And State Water Contractors as well as
14 Department of Water Resources need time to review the
15 transcript and prepare cross-examination for this
16 witness now that he has provided new, surprise expert
17 witness testimony that has not ever been submitted in
18 this proceeding.

19 CO-HEARING OFFICER DODUC: Miss Wehr.

20 Oh, I'm sorry. Before we get to you, let's
21 hear from Miss Cavanaugh.

22 MS. CAVANAUGH: Catherine Cavanaugh for the
23 Department of Water Resources.

24 We join in that request.

25 I'm done.

1 CO-HEARING OFFICER DODUC: All right. Let's
2 hear from the other parties for -- I'll give you the
3 last word, Miss Wehr.

4 Mr. Keeling.

5 MR. KEELING: This isn't the first time that
6 cross-examination of the last two years has elicited
7 information not within the four corners of the direct
8 testimony.

9 In a number of other instances, when parties
10 would have very much liked to follow up in
11 cross-examinations, but the Hearing Officers have been
12 disciplined so far in that and we would have chaos if
13 this request were to be granted and set a precedent
14 going forward. That's our position.

15 Tom Keeling for the San Joaquin County
16 Protestants.

17 MS. MESERVE: May I?

18 CO-HEARING OFFICER DODUC: You just -- You
19 just caused Mr. Jackson to sit down.

20 Thank you, Mr. Keeling.

21 (Laughter.)

22 CO-HEARING OFFICER DODUC: Miss Meserve.

23 MS. MESERVE: I should add that should any of
24 the parties wish to ask Mr. Hansen regarding his
25 knowledge of Garter Snake and the potential

1 implications of the Project, every single
2 cross-examiner had that opportunity.

3 CO-HEARING OFFICER DODUC: Miss Morris.

4 MS. MORRIS: Thank you.

5 I just want to make it clear that I don't
6 think in this two-year proceeding, or however long
7 we've been doing this, new expert testimony based on
8 additional potential impacts from this Project was
9 elicited in cross-examination. And so there's a
10 difference between going between -- beyond the four
11 corners in cross-examination of a witness' testimony.

12 But this witness provided expert opinion
13 testimony, and we did not have a chance to, one, ever
14 see it or, two, cross-examine him on what he reviewed
15 to rely on those opinions; if there's other things, who
16 he was working for, any of those important issues that
17 we would want the opportunity, and due process allows,
18 in order to ask cross-examination to understand his
19 understanding and -- and basis for those opinions.

20 CO-HEARING OFFICER DODUC: Now, Miss Wehr.

21 MS. WEHR: I can make it clear on redirect the
22 extent of Dr. -- Mr. Hansen's preparation for this
23 unexpected cross-examination, and allow for recross by
24 DWR or other parties on those issues, if -- if that
25 helps.

1 Again, Mr. Hansen had not previously prepared
2 this testimony, and so I think it's incorrect to
3 describe it as surprise testimony. It might be
4 surprise answers to cross-examination by another party.

5 But perhaps the best -- the best option here
6 would just be to allow me to make some clarifying
7 questions during redirect that will allow the other
8 parties the chance to clarify the extent of
9 Mr. Hansen's preparation, his experience with WaterFix
10 Project, and his understanding of potential impacts of
11 construction.

12 I think, otherwise, it would be prejudicial to
13 our witness and to Grassland Water District, and
14 perhaps to cross-examining parties, to allow DWR the
15 time to bring Mr. Hansen back into this room, you know,
16 having prepared questions.

17 He clearly answered these questions
18 spontaneously as he was being asked them.

19 CO-HEARING OFFICER DODUC: All right. Hold
20 on, Miss Morris.

21 I'm going to take Miss Wehr up on her offer to
22 look -- to add some clarity based on her redirect and
23 then we will open it up for recross.

24 And, Miss Morris, Miss Cavanaugh, if
25 necessary, we will revisit your motion then.

1 All right. Miss Wehr. Actually, why don't
2 you just stay there. I don't think this will take
3 long.

4 MS. WEHR: Thank you.

5 REDIRECT EXAMINATION BY

6 MS. WEHR: Mr. Ortega, I'd like to ask you a
7 few questions about your answers to the
8 cross-examination questions that were asked.

9 And, Mr. Hunt, if you could pull up Exhibit
10 GWD-21 and scroll to Page 4, please.

11 (Exhibit displayed on screen.)

12 MS. WEHR: Mr. Ortega, Miss Morris asked you
13 to review the second and third bullets on this page.

14 And -- And she asked you if in the language of
15 these bullets Reclamation had essentially made a
16 commitment to the CVPIA Refuges to meet its legal
17 obligations under the CVPIA.

18 In your answers, you stated that, yes, that
19 commitment had been stated in the letter, but you also
20 made some caveats to that answer.

21 I believe you said it was unclear how
22 Reclamation would meet that obligation.

23 What did you mean by "how"? Did you mean
24 physically how Reclamation would deliver water,
25 administratively how, or . . .

1 WITNESS ORTEGA: I think both, yeah,
2 physically and administratively.

3 So, you have to -- There's policies that they
4 would put in place to -- to protect their ability to
5 deliver the -- the water supply to the Refuges south of
6 the Delta.

7 MS. WEHR: Okay. And you also stated that the
8 letter indicated there would need to be future
9 mitigation measures.

10 Do you understand, from your review of this
11 letter, how and when Reclamation intends to develop or
12 implement those mitigation measures?

13 WITNESS ORTEGA: I do not. In my mind, this
14 is a non-binding letter, so that's to be determined.

15 MS. WEHR: If we can scroll for the bottom of
16 Page 4.

17 (Exhibit displayed on screen.)

18 MS. WEHR: There's a discussion that discusses
19 the Integration Agreement that Reclamation would
20 develop.

21 And the top of Page 5, I believe, is what --
22 Is that what you're referring to, accounting and
23 mitigation?

24 WITNESS ORTEGA: Yes.

25 MS. WEHR: And does this letter not state that

1 Reclamation would develop those in the future through
2 an Integration Agreement with DWR?

3 WITNESS ORTEGA: It does.

4 MS. WEHR: And, to your knowledge, has
5 Reclamation developed an Integration Agreement with
6 DWR?

7 WITNESS ORTEGA: No.

8 MS. WEHR: Thank you.

9 I also want to clarify your statements about
10 your responses to questions about historic water
11 deliveries and the failure to achieve CVPIA Refuge
12 water requirements.

13 What is your CVP contract total?

14 WITNESS ORTEGA: 180,000 acre-feet.

15 MS. WEHR: And what amount of that 180,000
16 acre-feet is CVP water delivered as Level 2 supply?

17 WITNESS ORTEGA: 125,000 acre-feet.

18 MS. CAVANAUGH: And so the remaining amount,
19 55,000 acre-feet, is Incremental Level 4?

20 WITNESS ORTEGA: Correct.

21 MS. WEHR: And that is what -- Is that what
22 you described as being acquired from willing sellers,
23 that Incremental Level 4 water?

24 WITNESS ORTEGA: Yes.

25 MS. WEHR: Do you consider Level 2 deliveries

1 from the CVP to be more reliable source of water than
2 Incremental Level 4?

3 WITNESS ORTEGA: Yes.

4 MS. WEHR: And you typically receive 100
5 percent Level 2 allocation; is that correct?

6 WITNESS ORTEGA: Correct.

7 MS. WEHR: With the exception of critically
8 dry years.

9 WITNESS ORTEGA: Correct.

10 MS. WEHR: Level 2 CVP deliveries from the
11 Delta are the primary subject of your concern regarding
12 the WaterFix Project?

13 WITNESS ORTEGA: Correct.

14 MS. WEHR: And is Level 2 required on a
15 monthly delivery time-scale in most months?

16 WITNESS ORTEGA: Yes.

17 MS. WEHR: In 2014 and 2015, I believe you
18 testified that those monthly water requirements were
19 not met?

20 WITNESS ORTEGA: Correct.

21 MS. WEHR: And in 2015, did you receive the
22 required 75 percent allocation of Level 2 water?

23 WITNESS ORTEGA: We did not.

24 MS. WEHR: In 2014, did you receive the
25 required 75 percent?

1 WITNESS ORTEGA: We did not.

2 MS. WEHR: Okay. I would like to quickly go
3 to DWR-1069, Exhibit 1069, the slide that Ms. Morris
4 showed you. I believe it's Slide 69.

5 (Exhibit displayed on screen.)

6 MS. WEHR: This is a chart, and you were asked
7 to confirm that Refuge Level 2 deliveries would be
8 essentially more or less the same under the various
9 alternatives for the WaterFix Project.

10 Can you review this slide and tell me if this
11 slide includes any analysis of the monthly deliveries
12 to the Refuges?

13 WITNESS ORTEGA: It does not.

14 MS. WEHR: Thank you.

15 Mr. Hansen, have you -- Were you contacted by
16 Miss Meserve or any other representative on behalf of
17 the parties' local agencies for the Delta, Friends of
18 Stone Lakes, or any others that Miss Meserve represents
19 in regard to your testimony today?

20 WITNESS HANSEN: I was not.

21 MS. WEHR: And were you provided any questions
22 by myself or any other representative of Grassland
23 Water District that were similar or reflective of the
24 questions that Miss Meserve asked you today?

25 WITNESS HANSEN: No.

1 MS. WEHR: Can you briefly describe your
2 previous history working on the BDCP Project.

3 WITNESS HANSEN: I have worked as a consultant
4 for a number of larger agencies. We've had various
5 contracts.

6 I served two purposes in my career: One is as
7 an independent research ecologist; the other is a
8 consultant to provide information on my areas of
9 expertise for projects such as these. I make
10 contributions that are relevant to my species of
11 interest.

12 I believe it was probably ICF International
13 who I was contracting through at this time. And my
14 role in this process was to model habitat in the BDCP
15 area for Giant Garter Snake; it also included
16 California Tiger Salamander and Western Pond Turtle, as
17 well as other species of interest.

18 And then to, again, design habitats in tidally
19 influenced areas that would be suitable as mitigation
20 or restoration. The restoration component as far as
21 BDCP was concerned.

22 We did look a little bit at alignments and
23 discussed what the impacts might be with regard to
24 movement of Giant Garter Snakes. This included
25 discussions with the U.S. Fish and Wildlife Service

1 regarding the function of the toe drains associated
2 with these tunnels to move Giant Garter Snakes from
3 north to south.

4 I would say that my involvement in this part
5 of the process probably ended four or five years ago.

6 MS. WEHR: Thank you. That's good
7 clarification.

8 So you have not reviewed the Final EIR/EIS for
9 the WaterFix Project?

10 WITNESS HANSEN: Not recently, and probably
11 not in its entirety.

12 MS. WEHR: Have you reviewed the Biological
13 Opinions or Biological Assessment for the Project?

14 WITNESS HANSEN: Not necessarily, and not in
15 their entirety.

16 MS. WEHR: And have you been retained by
17 Grassland Water District or any other party to work on
18 the WaterFix Project as it's more currently described?

19 WITNESS HANSEN: I have not.

20 MS. WEHR: Thank you.

21 CO-HEARING OFFICER DODUC: Thank you,
22 Miss Wehr.

23 Recross.

24 We'll begin with State Water Contractors and
25 Department/Reclamation.

1 Does someone else wish to do recross?

2 Not seeing any other takers.

3 MS. MORRIS: I would -- I'd like to make a
4 request that we take lunch.

5 Again, I have not had any time to look at the
6 opinions that were offered. I don't have a copy of the
7 transcript.

8 I do want the opportunity to look at what was
9 said and the opinions that were offered and the basis
10 to probe further.

11 I can -- I can make my way through 15 minutes,
12 but I'd rather be more efficient and have an
13 opportunity to at least attempt to try to be able to
14 probe into the basis of these opinions that were
15 offered.

16 CO-HEARING OFFICER DODUC: All right. That's
17 a fair enough request.

18 Why don't we go ahead and take an early and
19 long lunch break, and we will turn at 1 o'clock.

20 MS. MEHR: If I can.

21 May I request that any cross-examination of
22 Mr. Ortega be granted now? He has a Board meeting to
23 run this afternoon in his office.

24 CO-HEARING OFFICER DODUC: Miss Morris.

25 MS. MORRIS: I don't have anything for

1 Mr. Ortega.

2 CO-HEARING OFFICER DODUC: I do have a
3 question for Mr. Ortega.

4 In responding to cross-examination by
5 Mr. Jackson, you had indicated that there were terms
6 and conditions that might address the concerns that
7 Grassland raised.

8 At this time, does Grassland intend to submit
9 any proposed terms and conditions for these Water
10 Rights Permits? And if so, when?

11 WITNESS ORTEGA: Yes, I think that's something
12 that we can do, and I think we can do that in short
13 order.

14 CO-HEARING OFFICER DODUC: Might you be doing
15 as more -- part of rebuttals?

16 MS. MEHR: Yes, absolutely.

17 CO-HEARING OFFICER DODUC: Thank you.

18 CO-HEARING OFFICER MARCUS: And this could
19 just be me because I've read it a few times. I just
20 want understand what it is you're saying here.

21 Because if you look at your testimony, GWD-14,
22 on Page 11 at the bottom, you talk about Reclamation's
23 letter and its hindcasting approach and that it
24 would -- it -- it would be the water that could only
25 have been diverted through the WaterFix would be

1 exclusively available to the participating entities.

2 Is your -- Your current is that, as you say
3 later on in multiple places, that without the details,
4 that the devil's in the details and you're worried
5 about it.

6 But -- But reading it this way makes it sound
7 as if there's on some calculation that the Bureau is
8 planning to do, not just take whatever comes out of the
9 South Delta pumps.

10 WITNESS ORTEGA: Is there a question there?
11 I'm sorry.

12 CO-HEARING OFFICER MARCUS: Well, no. The
13 question is just, I want to be sure that what you're --
14 you're saying is just that there's not enough clarity
15 and you're worried, even -- even were that the case,
16 that there are these other issues where, because more
17 water might be coming that would be stored, for
18 example, in San Luis, you want priority because that
19 space would be taken up.

20 I'm following --

21 WITNESS ORTEGA: Correct.

22 CO-HEARING OFFICER MARCUS: -- that based on
23 it.

24 But --

25 WITNESS ORTEGA: Yes.

1 CO-HEARING OFFICER MARCUS: -- in reading the
2 Reclamation letter and this. And we haven't had real
3 testimony on that or anything, not as much as I would
4 have thought.

5 It -- It sounds as if they're saying the stuff
6 that could only have been put through WaterFix is what
7 would go to the participating Contractors, not whatever
8 goes through the North Delta diversion.

9 And I just want to know if that's your
10 understanding --

11 WITNESS ORTEGA: Yes.

12 CO-HEARING OFFICER MARCUS: -- of it or not.
13 It seems to be here but it wasn't real clear in your --

14 WITNESS ORTEGA: Yes --

15 CO-HEARING OFFICER MARCUS: -- testimony.

16 WITNESS ORTEGA: Yes, that is my
17 understanding.

18 CO-HEARING OFFICER DODUC: Ms. Morris, do you
19 still not have questions of Mr. Ortega.

20 MS. MORRIS: I'm sorry. I do have one.

21 CO-HEARING OFFICER DODUC: Okay.

22 MS. MORRIS: Thank you.

23 Or it's really two.

24 RE-CROSS-EXAMINATION BY

25 MS. MORRIS: In your testimony, you talked

1 about, I believe you said, five of the Refuges did not
2 have the capacity to take water; is that correct?

3 WITNESS ORTEGA: The conveyance.

4 MS. MORRIS: The conveyance.

5 Okay. And then -- And you talked about 2014
6 and 2015 and you didn't receive the full Level 2
7 deliveries.

8 What percentage -- What did you receive in
9 2014?

10 WITNESS ORTEGA: It fell about 50 percent of
11 the contract total and about 65 percent of our Level 2
12 supply.

13 MS. MORRIS: And in 2015?

14 WITNESS ORTEGA: The same.

15 MS. MORRIS: And isn't it true that, besides
16 the Exchange Contractors, that there -- that the other
17 South-of-Delta deliveries were zero in those years?

18 WITNESS ORTEGA: Yes.

19 MS. MORRIS: Thank you.

20 CO-HEARING OFFICER DODUC: All right. Thank
21 you, Mr. Ortega, for joining us today.

22 (Mr. Ortega excused.)

23 CO-HEARING OFFICER DODUC: We will reconvene
24 at 1 o'clock.

25 (Mr. Keeling approaches podium.)

1 CO-HEARING OFFICER DODUC: Hold on. Does this
2 need to be on the record?

3 MR. KEELING: Probably.

4 CO-HEARING OFFICER DODUC: All right. Miss --
5 Candace, don't go off yet.

6 Mr. Keeling.

7 MR. KEELING: Tom -- Tom Keeling for the
8 San Joaquin County Protestants.

9 And we -- we need a little clarification on
10 order and testimony this afternoon, because the way I
11 see it right now, we have our first panel -- And I say
12 ours. I mean Sacramento Water Agency, Local Agencies
13 of the North Delta, San Joaquin County, South Delta
14 Water Agency, et cetera.

15 We have our first panel showing up now, coming
16 in now. We anticipate that, after lunch, they will
17 give their direct and they will be crossed.

18 We understand there's a possibility that our
19 second panel --

20 CO-HEARING OFFICER DODUC: Before you go much
21 further, Miss Meserve and you yourself, Mr. Keeling,
22 submitted Opening Statements, written Opening
23 Statements, which we have read and appreciate very
24 much.

25 Do you intend to each request 20 minutes to

1 provide oral Opening Statements?

2 MR. KEELING: I do not.

3 CO-HEARING OFFICER DODUC: Miss Meserve?

4 MS. MESERVE: I have an abbreviated version
5 that will take about 10 minutes, I believe.

6 CO-HEARING OFFICER DODUC: All right. So
7 factor that in as well.

8 And then we will -- And --

9 MR. KEELING: And --

10 CO-HEARING OFFICER DODUC: The anticipated
11 direct of your Panel 1 in terms of time? How much do
12 you anticipate needing?

13 MR. KEELING: I anticipate between an hour and
14 an hour and 20 minutes.

15 MS. MESERVE: (Nodding head.)

16 MR. KEELING: And --

17 CO-HEARING OFFICER DODUC: And at this time,
18 what is the anticipated cross for Panel 1?

19 Miss Ansley.

20 MS. ANSLEY: I think, for Panel 1, I would
21 an -- I would anticipate about 30 to 40 minutes. I'm
22 endeavoring to keep it pretty brief.

23 CO-HEARING OFFICER DODUC: Thank you.

24 Any other cross of just Panel 1?

25 MR. STROSHANE: Restore the Delta, Group 31.

1 I'm Tim Stroshane.

2 I anticipate about five minutes.

3 CO-HEARING OFFICER DODUC: All right. So
4 it -- Oh, Mr. Jackson.

5 MR. JACKSON: Michael Jackson on behalf of the
6 CalSPA parties.

7 I would estimate 20 minutes depending on what
8 everybody else --

9 CO-HEARING OFFICER DODUC: Okay.

10 MR. JACKSON: -- says.

11 CO-HEARING OFFICER DODUC: So that's about --
12 Oh, Miss Morris. More?

13 MS. MORRIS: I -- I -- I imagine maybe 10
14 minutes, but I will wait to see how DWR does and
15 whether I need to clean anything --

16 CO-HEARING OFFICER DODUC: All right.

17 MS. MORRIS: -- up.

18 MR. KEELING: In light of this and because
19 we -- we understand that we -- what the protocols are,
20 we are prepared to have our second panel -- with the
21 caveat Mr. Nomellini having health issues -- but that
22 would be Mr. Neudeck and Mr. Burke here later in the
23 afternoon if -- if that's --

24 CO-HEARING OFFICER DODUC: Please.

25 MR. KEELING: Okay. And can I assure our next

1 panel, which would be Mr. Lambie, Mr. Tootle, et al.,
2 that they do not need to show up until tomorrow?

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

4 MR. KEELING: Thank you very much.

5 CO-HEARING OFFICER DODUC: All right. We have
6 now a slighter -- slightly shorter lunch break but we
7 will return at 1 o'clock.

8 (Lunch recess at 11:56 a.m.)

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1 Tuesday, March 13, 2018 1:00 p.m.

2 PROCEEDINGS

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4 CO-HEARING OFFICER DODUC: All right. It is
5 1 o'clock.

6 And all those who watched videos on their
7 iPads should turn the sound to silent or vibrate.

8 Are there any housekeeping matters before we
9 return to Ms. Morris?

10 Mr. Bezerra.

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

12 So we have been diligently watching the
13 progress of the panels to assess how -- when the water
14 forum panels may come up relative to our scheduling
15 issues.

16 So we -- we have two scheduling issues. I'm
17 going to present solutions, so . . .

18 As I mentioned earlier, Dr. -- Dr. Addley has
19 a health issue that would make it very difficult for
20 him to be here longer than the need to testify.

21 We also have a witness who has pre-paid
22 travel, that has been on the calendar for nine months,
23 for the remainder of the week.

24 So it looks to us like we are going to get to
25 our panels probably first thing Thursday. It -- Right.

1 And I -- I've been talking to Petitioners, to
2 Delta and San Luis -- excuse me -- Westlands and
3 San Luis Delta-Mendota, other people who may be
4 interested in cross-examining us.

5 Based on the discussion immediately before
6 lunch, it looks like you're going to get through two of
7 the Delta panels today and probably get to two of them
8 tomorrow.

9 And so --

10 CO-HEARING OFFICER DODUC: Remember tomorrow's
11 a half day.

12 MR. BEZERRA: Correct. And that figures into
13 the thinking.

14 So what we'd like to request is that our Water
15 Forum panels start no earlier than first thing Thursday
16 morning. That will allow us to schedule the first
17 panel, obviously, first thing. That will then help us
18 out with Dr. Addley's health issue because we'll be
19 able to more definitively set when he'll need to be
20 here for our Panel 2.

21 And then after discussions with the various
22 people who are interested in potentially
23 cross-examining our panels, what we'd like to do is
24 bring Dr. Hammersmark back as a panel of one on Monday.
25 Nobody who's interested in cross-examining us has an

1 issue with that.

2 Petitioners requested that if we do that, to
3 the extent someone refers to Dr. Hammersmark in cross,
4 that they come back with Dr. Hammersmark on Monday. We
5 have no problem with that.

6 I have not been able to talk to the people --
7 the groups immediately following us yet, but they're
8 associated with Sacramento County and we generally have
9 been able to work very well with Sacramento County so I
10 expect to be able to sort that out.

11 So, what I'd like to be able to do is -- is
12 bring The Water Forum panels in first thing Thursday
13 and then go from there with Dr. Hammersmark coming on
14 Monday.

15 CO-HEARING OFFICER DODUC: As long as you
16 arrange things with the other parties so that there is
17 not a hole.

18 MR. BEZERRA: And the -- the key thing is
19 that, that might end up with you having some slack time
20 tomorrow before 1 o'clock if those two panels finish.
21 But given that it's an early day, it seemed like that
22 might work for you.

23 So if that works, we'll plan to be here first
24 thing Thursday.

25 CO-HEARING OFFICER DODUC: Sorry. Tomorrow is

1 Wednesday.

2 MR. BEZERRA: I'm sorry.

3 CO-HEARING OFFICER DODUC: Yes. All the days
4 are running together in my mind.

5 MR. BEZERRA: They are all running together,
6 yes, so --

7 CO-HEARING OFFICER DODUC: As long as we're
8 not talking about gigantic gaps in the schedule.

9 MR. BEZERRA: No. It -- It sounds like you've
10 got two panels that each may consume about an hour
11 tomorrow so, if you start at 9:30, you may finish 11:30
12 or noon or so, and you have a little bit of -- little
13 bit of time, but you're already tomorrow early, anyway.

14 So if that works . . .

15 CO-HEARING OFFICER DODUC: I see Miss Ansley
16 frowning. Why is she frowning if you've worked it out
17 her?

18 MS. ANSLEY: I'm -- I am fine with his
19 proposed schedule changes. What I'm frowning about and
20 wondering about is whether we really will be through
21 LAND by first thing Thursday morning.

22 But I understand what he's asking for is to
23 get a commitment that he --

24 CO-HEARING OFFICER DODUC: No, no.

25 MS. ANSLEY: -- will not be on until Thursday,

1 at least.

2 CO-HEARING OFFICER DODUC: Yes.

3 MS. ANSLEY: And that is fine with the
4 Petitioners.

5 CO-HEARING OFFICER DODUC: I make no
6 commitments as to when we will get to people. It's
7 just the flow of this hearing, as we have learned.

8 MR. BEZERRA: I -- That's -- That's fine with
9 us. We'll have our Panel 1 here first thing Thursday,
10 our Panel 2 with Dr. Addley. Then we can schedule
11 better for him to be here on Thursday, if necessary.

12 Thank you.

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

15 (Laughter.)

16 MR. BEZERRA: Fare-thee-well.

17 CO-HEARING OFFICER DODUC: Miss Meserve.

18 MS. MESERVE: Just a quick update on the
19 scheduling to follow up on Mr. Bezerra's comments.

20 As previously agreed, I believe, the Sac
21 Regional order of direct number 5 will be done with --
22 after Group 6 due to the Ms. -- Dr. Paulsen issue;
23 right?

24 CO-HEARING OFFICER DODUC: Let's -- Let's --
25 Before you get into more detail and -- and give me a

1 headache, Miss Meserve.

2 Miss Mitterhofer, I believe Hearing Team staff
3 is working on a revised order with all the changes that
4 have been requested. That will be posted by the end of
5 the day?

6 MS. MITTERHOFER: Yeah. We're in the process
7 of sending that out right now so --

8 CO-HEARING OFFICER DODUC: Take a look at
9 that, and then come talk to me after you've seen that
10 if there are changes or -- or mistakes.

11 MS. MESERVE: May I bring up one new thing
12 with your indulgence that is quite minor but I think I
13 want to make sure that All the parties are aware of.

14 With respect to order of direct testimony
15 number 6, which is Yolo, LAND, County of San Joaquin,
16 due to some availability issues, we would like to go
17 with the transpor -- basically change the order of it
18 being transportation, then the farmers, and then the
19 panel with the Sacramento County Supervisor Nottoli
20 there.

21 So it would be not -- It's almost --

22 CO-HEARING OFFICER DODUC: Almost in the order
23 shown?

24 MS. MESERVE: But it's slightly different.

25 So I don't think it would affect cross-exam

1 very much, but that has to do with we don't have a
2 witness available on that second panel when we think we
3 may need them.

4 MS. ANSLEY: Perhaps we can revisit that when
5 we see how the next day or two goes.

6 CO-HEARING OFFICER DODUC: And the revised
7 chart.

8 MS. ANSLEY: Yeah.

9 CO-HEARING OFFICER DODUC: Because now it
10 means nothing to me.

11 MS. ANSLEY: I'm going to ask Miss Meserve to
12 raise it again so that I can that sort of analyze that
13 in context, a change in the panel order.

14 CO-HEARING OFFICER DODUC: Let's just wait
15 until you see the revised chart. The staff will be
16 posting later today and then we will revisit it as part
17 of housekeeping tomorrow.

18 All right. Miss Morris and Miss Ansley, your
19 recross, please.

20 MS. MORRIS: Thank you.

21 RE-CROSS-EXAMINATION BY

22 MS. MORRIS: Mr. Hansen, I'd like to ask you a
23 couple questions about your work on this Project.

24 So, you testified earlier --

25 CO-HEARING OFFICER DODUC: I'm sorry. Hold

1 on.

2 Keep in mind, Miss Morris, that your recross
3 needs to stay within the scope of redirect.

4 MS. MORRIS: I will keep that in mind.

5 CO-HEARING OFFICER DODUC: I'm sure Miss Wehr
6 will chime up if she has objections.

7 MS. MORRIS: You testified on redirect that
8 you worked on BDCP; correct?

9 WITNESS HANSEN: Portions of it, yes.

10 MS. MORRIS: And what portions?

11 WITNESS HANSEN: Environmental impacts.

12 MS. MORRIS: And for whom did you work?

13 WITNESS HANSEN: I worked with individuals
14 from ICF, but it was a large group of people. I
15 believe that is where my contract originated, bearing
16 in mind that this was also something that shifted
17 around amongst various Contractors. I was part of a
18 larger panel of consultants, expert consultants.

19 But ICF International.

20 MS. MORRIS: So you, at some point, were a
21 subconsultant to DWR through ICF?

22 WITNESS HANSEN: I can't recall specifically
23 whether DWR was the prime, but I assume the answer
24 would be yes. But I was a subconsultant.

25 MS. MORRIS: And you said the contract moved

1 around, and you -- you were with a panel.

2 Was -- Was the rest of your panel ICF members?

3 WITNESS HANSEN: No, not -- not exclusively.

4 And this has been, again, probably at least five years.

5 So the nature of my -- my role outside of the
6 role of researcher's role of expert. And I tend to
7 have a lot of overlap on various projects, and new
8 teams are brought on every couple of years. There can
9 be transfer.

10 I honestly do not recall the mechanics of --
11 of --

12 MS. MORRIS: Okay.

13 WITNESS HANSEN: -- the contract at this time.

14 MS. MORRIS: That's okay. I -- I appreciate
15 that. Sometimes it's difficult to recall things that
16 happened long ago.

17 I have a question about the timing of your
18 contract. You said it ended five years ago or that --

19 WITNESS HANSEN: That --

20 MS. MORRIS: -- it was five years ago?

21 WITNESS HANSEN: I wouldn't -- I wasn't able
22 to prepare for this. I was not an -- an --
23 anticipating this line of questioning, so I am only
24 going as a rough estimate.

25 I know, judging what the age my children are,

1 that time goes by faster than I -- than I expect
2 sometimes. So it may have been longer than five years,
3 but it's been I would say at least five years.

4 MS. MORRIS: So it's fair to say that you
5 never worked on the Final EIR/EIS for California
6 WaterFix.

7 WITNESS HANSEN: I believe that to be true. I
8 have not worked on it since it became the California
9 WaterFix.

10 MS. MORRIS: Great. Thank you.

11 And I apologize for -- I normally type my --
12 my questions because my handwriting is awful.

13 But if you could pull up, please, LAND-3, see
14 if you can struggle through this with me.

15 (Exhibit displayed on screen.)

16 MS. MORRIS: And if you can zoom out, please.

17 (Exhibit displayed on screen.)

18 MS. MORRIS: Thank you.

19 You testified in response to Miss Meserve
20 questions about this map.

21 And did you prepare this map?

22 WITNESS HANSEN: I did not prepare the map,
23 no.

24 MS. MORRIS: Do you know who prepared this
25 map?

1 WITNESS HANSEN: Whether this came from ICF or
2 not, I am not sure. I provided information that
3 contributed to the habitat values that you see on the
4 map.

5 MS. MORRIS: Are you aware that -- Can you
6 zoom out a little bit long -- a little bit more? I'm
7 so sorry.

8 (Exhibit displayed on screen.)

9 MS. MORRIS: Right there.
10 Are you familiar with BSK?

11 WITNESS HANSEN: No, I'm not.

12 MS. MORRIS: Did you work with anyone at BSK?

13 WITNESS HANSEN: Not to the best of my
14 knowledge.

15 MS. MORRIS: So is it fair to say that you
16 were not involved in the preparation of this map?

17 WITNESS HANSEN: Of that particular map,
18 that's correct.

19 MS. MORRIS: And you were not consulted.

20 WITNESS HANSEN: No.

21 MS. MORRIS: Thank you.

22 So do you know that the information depicted
23 in this map is accurate?

24 WITNESS HANSEN: I have not had an opportunity
25 to review the map, so I cannot comment.

1 MS. MORRIS: Thank you.

2 Have you looked at the -- And, I'm sorry, you
3 testified to this in the context of WaterFix, about
4 aquatic connectivity on the ground surface.

5 And you -- Have you -- And you mentioned in
6 your testimony that you would be concerned about
7 aquatic connectivity.

8 So my question is: In the area -- And you can
9 take this map down. I don't need it anymore. Thanks.

10 In the area of the CWF construction, did you
11 look at the aquatic connectivity of the ground surface
12 in the construction area?

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

14 Miss Meserve.

15 MS. MESERVE: I believe this exceeds the scope
16 of the redirect that was provided, which had to do with
17 his work on the -- on the BDCP and whether he knew of
18 the questions that I was going to ask him.

19 So I believe this would have been a question
20 that should have been asked earlier on.

21 CO-HEARING OFFICER DODUC: Miss Wehr.

22 MS. WEHR: I acknowledge that DWR did not have
23 a chance to ask these questions earlier. It does
24 exceed the scope of the direct.

25 So, you know, maybe a couple more questions

1 along these lines, but if the entire line of
2 questioning is -- is similar, then I will object.

3 CO-HEARING OFFICER DODUC: Until Miss Wehr
4 objects, since it is her witness.

5 MS. MORRIS: Well, I . . . I will reserve the
6 right to argue when the objection occurs because what
7 I'm doing is, having gone through the transcript,
8 looked at opinions this witness offered that I believe
9 are expert opinions, and they are surprise, regardless
10 if they were in response to questions that I believe
11 were entitled -- or should be entitled to explore the
12 basis upon which those were provided, and that's what I
13 intend to do.

14 But if --

15 CO-HEARING OFFICER DODUC: Are you now
16 renewing your motion/objection?

17 MS. MORRIS: If Miss Wehr would like to strike
18 the entirety of Miss Meserve's cross-examination
19 regarding impacts to Giant Garter Snakes, I'd be happy
20 to end this cross-examination.

21 CO-HEARING OFFICER DODUC: Miss Wehr, were you
22 indicating that you were not objecting yet to
23 Miss Morris' line of questioning?

24 MS. WEHR: Correct.

25 I'm not sure how much longer she has to ask

1 about particular testimony that he gave on cross. I'm
2 happy to let a few questions stand but not willing to
3 let my witness be interrogated beyond the scope of
4 redirect examination.

5 CO-HEARING OFFICER DODUC: All right. I will
6 defer for Miss Wehr for now, given that it is her
7 witness who you are questioning.

8 But, Miss Morris, I will caution you that
9 objecting to surprise cross is not proper procedure.

10 The cross-examination conducted by
11 Miss Meserve was done so with the proper foundation
12 laid, and it was relevant to the key hearing issues for
13 Part 2.

14 You, of course, do have recourse in presenting
15 different information as part of your rebuttal, but
16 that does not necessarily mean that I'm going to be as
17 generous as Miss Wehr is in terms of allowing you to go
18 beyond the scope of redirect in your recross.

19 MS. MORRIS: So . . . I appreciate all of
20 that, and I'm not trying to be argumentative.

21 But in the context of cross-examination, I am
22 not only entitled to present rebuttal testimony because
23 this testimony was not presented in this witness' case
24 in chief, and that is what the purpose of rebuttal
25 testimony is, to respond to case in chief, not to

1 respond to new expert opinions that are pro-offered on
2 and come out through cross-examination.

3 But I will endeavor to be efficient and stick
4 to the lines, but I -- I -- I do want to retain on the
5 record to argue because I do think we are limited in
6 how we can respond.

7 CO-HEARING OFFICER DODUC: All right. We will
8 take that under advisement and let you proceed for now.

9 MS. MORRIS: Let me try to do -- Let me try to
10 cut this off and be as efficient as possible.

11 So, you made a lot of statements on the record
12 in response to Miss Meserve on the basis that you had
13 worked on the Bay-Delta Conservation Plan; correct?

14 WITNESS HANSEN: Correct.

15 MS. MORRIS: Have you, since your contract
16 terminated or was ended mutually, in whatever capacity,
17 and at least five years ago, have you reviewed
18 documents related to the current Project, California
19 WaterFix, in particular H3+?

20 WITNESS HANSEN: No.

21 MS. MORRIS: How about H -- operational
22 scenario H3 and H4?

23 WITNESS HANSEN: No.

24 MS. MORRIS: So the testimony that you
25 provided in regards to the Giant Garter Snake when it

1 was specific to impacts that may be associated with the
2 WaterFix was not based on an analysis of California
3 WaterFix H3+; was it?

4 WITNESS HANSEN: That's correct.

5 MS. MORRIS: It was limited to broad
6 observations from your experience working on the
7 Bay-Delta Conservation Plan.

8 WITNESS HANSEN: Based that way and offered
9 that way, yes.

10 MS. MORRIS: Have you reviewed mitigation
11 measures in the California WaterFix H3+ Incidental Take
12 Permit?

13 WITNESS HANSEN: No.

14 MS. MORRIS: Have you reviewed the
15 Final EIR/EIS in regards to mitigation measures
16 provided for Giant Garter Snake there?

17 WITNESS HANSEN: No.

18 MS. MORRIS: Are you aware that DWR has made
19 Environmental Commitments in both the EIR and -- and is
20 required through the ITP to -- to provide mitigation
21 acres, both aquatic and upland, for Giant Garter Snake?

22 WITNESS HANSEN: I am aware of that. That is
23 not new.

24 MS. MORRIS: And do you understand what the --
25 the acreages are?

1 WITNESS HANSEN: Specifically, no, I am not.

2 MS. MORRIS: Would it surprise you to hear
3 that in the ITP it's a three to one based on the amount
4 of habitat loss?

5 WITNESS HANSEN: No. That's standard.

6 MS. MORRIS: Okay. I have no further
7 questions.

8 CO-HEARING OFFICER DODUC: Are you still
9 reserving the right to make your argument with respect
10 to the cross-examination of Mr. Hansen by Miss Meserve?

11 MS. MORRIS: I've made my objections on the
12 record, and I can deal, I think, with it in legal
13 briefing.

14 CO-HEARING OFFICER DODUC: I'm sorry. I
15 didn't catch that last part.

16 MS. MORRIS: I think anything else I can
17 handle in legal briefing.

18 CO-HEARING OFFICER DODUC: All right. Thank
19 you, Miss Morris.

20 I think that concludes Dr. Hansen's testimony.

21 We will await Dr. Petrie's.

22 MS. WEHR: Yes.

23 I submitted a renewed motion this morning to
24 have him testify on or after Monday, the 26th.

25 CO-HEARING OFFICER DODUC: We will get to that

1 when we get to that.

2 MS. WEHR: Thank you.

3 CO-HEARING OFFICER DODUC: Thank you,
4 Ms. Wehr.

5 (Witness Hansen excused.)

6 CO-HEARING OFFICER DODUC: All right. We are
7 now moving on to Miss Meserve, who has a 10-minute
8 Opening Statement before the first panel of
9 Mr. Robinson, Dr. Shilling, Mr. Stirling, Miss Hemly
10 and Mr. Wilson.

11 MS. MESERVE: Can we just go ahead and have
12 everybody come up?

13 CO-HEARING OFFICER DODUC: Um-hmm.

14 MS. MESERVE: Yeah. Come on.

15 UNIDENTIFIED SPEAKER: Someone left their
16 phone at this desk.

17 CO-HEARING OFFICER DODUC: Okay. He's back
18 for it. Make sure it's his.

19 MS. MORRIS: It has a nice crack in it.

20 MS. MESERVE: Would you like me to go ahead
21 and begin while they finish setting up, or would you
22 like me to wait?

23 CO-HEARING OFFICER DODUC: I think they are
24 pretty much settled; right?

25 All right. Actually, no, you have to wait,

1 because Miss Gaylon is once again doing the job of
2 three people.

3 MS. MESERVE: The one-woman show.

4 CO-HEARING OFFICER DODUC: Yes.

5 And just so all you attorneys know,
6 Miss Gaylon is looking forward to becoming one of you.
7 So please do try to set a good example for her during
8 this hearing.

9 MS. MESERVE: Additional pressure.

10 CO-HEARING OFFICER DODUC: Yes.

11 MS. MESERVE: Okay.

12 CO-HEARING OFFICER DODUC: Miss Gaylon,
13 Miss Meserve has 10 minutes to provide an Opening
14 Statement.

15 And then how much time do you need for your
16 direct of this panel?

17 MS. MESERVE: I believe we've each -- We're
18 definitely under 20 minutes apiece, according to the
19 Hearing Officer's direction. I believe it will be
20 about an hour and 15 minutes.

21 CO-HEARING OFFICER DODUC: Great.

22 OPENING STATEMENT

23 MS. MESERVE: Good afternoon. Osha Meserve
24 with the Local Agencies of the North Delta and other
25 Protestants listed in the materials.

1 And for this panel, we've -- and for a couple
2 of other panels, we've joined the San Joaquin County,
3 Sacramento County, Yolo County, South and Central Delta
4 Water Agencies, and CSPA and AquAlliance.

5 And just for reference, I'm just giving the
6 overall Opening Statement that will apply to everything
7 we're going to do over the next few days.

8 CO-HEARING OFFICER DODUC: Yes. I did read
9 your written one.

10 MS. MESERVE: Okay. Thank you.

11 So . . . as we prepared our Part 2 testimony,
12 LAND and the other parties were hindered by the
13 incompleteness of the Petition itself and the failure
14 of Petitioners to provide the most basic information
15 about their Project to allow Protestants to understand
16 and respond to the Project's likely effects on water
17 users, fish and wildlife, and more generally the public
18 interest.

19 As just one example, the broad range of
20 operations continues to be a problem, combined with the
21 weak modeling approach, and provides inadequate
22 information with which to assess the impacts of the
23 changes that are proposed.

24 Petitioners have also incorrectly attempted to
25 convert a long-ago permit issued for the Hood site to

1 three other massive diversion sites in the North Delta.

2 The time to construct the Hood diversion has
3 long expired and the petition to extend time to
4 undertake that work remains pending in a separate
5 proceeding that is depicted in DWR-313.

6 In addition to being located at different
7 locations than the Hood, the new diversions would also
8 increase the capacity of the Projects and would likely
9 lead to more exports out of the estuary.

10 We believe this Petition should be subject to
11 the same informational requirements and standards as
12 other petitions for water rights that have come before
13 this Board.

14 The vast scale of impacts to water users and
15 the public in the entire region necessitates the full
16 and thorough understanding of the Project which almost
17 two and a half years into this hearing is still
18 missing.

19 Now, while we continue to -- While Petitioners
20 continue to attempt to minimize the scale of the change
21 proposed in this Petition, both on land and water, the
22 LAND and other Protestants' Part 2 testimony will help
23 describe for the Board the local, regional and
24 statewide impacts of the Project and why it would not
25 be in the public interest from either a local or a

1 statewide perspective.

2 Now, later this week or next week, you will
3 hear from the Sacramento County Public Interest Panel.
4 Russell Van Loben Sels is one of those witnesses, and
5 he will describe his concerns as the President of the
6 Five-County Farm Bureau and a long-time resident and
7 farmer to the town -- about impacts to the Town of
8 Clarksburg, Amistad Ranches and Delta agricultural
9 impacts more generally.

10 When we get to our Groundwater Focus Panel,
11 you will also hear about -- Whereas in Part 1 we were
12 looking at specific groundwater wells and users, in
13 Part 2 we are going to look more at how the Project and
14 the diversions from the river would strain the
15 already -- further strain the already-imperiled
16 groundwater basins to the east of the diversions.

17 The river is a major source of groundwater
18 recharge, and that recharge would be reduced by
19 diversions of the magnitude proposed in this Permit.
20 They would also reduce groundwater levels and harm
21 local water users, like the wildlife refuge, and -- and
22 others.

23 Agencies working to comply with these new
24 requirements, of SGMA in particular, are concerned
25 about how this Project would affect their ability to

1 reach sustainability.

2 And on that panel, the Board will hear from
3 John Lambie regarding the reductions in groundwater
4 levels, and the concerns regarding the depletions
5 caused by the diversions.

6 Now, today, we're going to hear from what
7 we've called the Community Impacts Focus Panel, which
8 is touching on both local and statewide impacts.

9 First, you will hear from David Stirling,
10 who's a retired resident of Walnut Grove, and he'll
11 describe how the specific impacts of constructing the
12 Project would be contrary to the local public interest,
13 especially during the lengthy construction process.

14 You will also hear from David Robinson, a
15 Volunteer Fire Department in Wal -- volunteer
16 firefighter in Walnut Grove, and he will describe how
17 the Project would interfere with the provision of
18 emergency services and his concern that the Project has
19 not planned for emergencies that would occur during the
20 construction process.

21 You'll hear from Daniel Wilson as well, a
22 farmer and businessperson and resident, providing
23 further information about the impacts of the Project on
24 agricultural operations as well as farm support
25 businesses.

1 Last today, you will hear from Sarah Hemly,
2 who will describe how she and her family developed the
3 Hemly Cider product from Delta pears, and about how the
4 Hemly Cider is just one of the many new innovative
5 farm-based products that's part of the national and
6 local farm-to-work movement.

7 Thank you.

8 So, with that, we're ready to begin.

9 And we will start with --

10 CO-HEARING OFFICER DODUC: Actually, swearing
11 witnesses in.

12 MS. MESERVE: Yes.

13 CO-HEARING OFFICER DODUC: If you could all
14 please stand and raise your right hands.

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DAVID STIRLING,
FRASER SHILLING,
DAVID ROBINSON,
DANIEL WILSON

and

SARAH HEMLY,

called as witnesses by the Environmental
Justice Coalition for Water, Islands, Inc.,
Local Agencies of the North Delta, Bogle
Vineyards/Delta Watershed Landowner Coalition,
Diablo Vineyards and Brad Lange/Delta
Watershed Landowner Coalition, Stillwater
Orchards/Delta Watershed Landowner Coalition,
Brett G. Baker and Daniel Wilson, Save Our
Sandhill Cranes, Friends of Stone Lakes
National Wildlife Refuge, the County of Yolo,
San Joaquin County, Sacramento County, Yolo
County, South and Central Delta Water
Agencies, and CSPA and AquAlliance, having
been duly sworn, were examined and testified
as follows:

CO-HEARING OFFICER DODUC: Thank you.

1 DIRECT EXAMINATION

2 MS. MESERVE: And starting with Mr. Stirling.

3 Is LAND-205-Errata a true and correct copy of
4 your testimony, Mr. Stirling?

5 WITNESS STIRLING: Pardon me?

6 MS. MESERVE: Is LAND-205-Errata a true and
7 correct copy of your testimony?

8 WITNESS STIRLING: Yes.

9 MS. MESERVE: And then is LAND-120 and
10 LAND-206 to 210 true and correct copies of materials
11 you've relied upon in preparing your testimony?

12 WITNESS STIRLING: Yes.

13 MS. MESERVE: Please proceed with your
14 testimony.

15 We've provided to the entire hearing list, as
16 well as to the projectionist, a compilation of .pdfs to
17 avoid having to look for things within the record as
18 they speak.

19 WITNESS STIRLING: Madam Projectionist, would
20 you put up the first frame, please.

21 (Exhibit displayed on screen.)

22 WITNESS STIRLING: My name is Dave Stirling.
23 My family and I chose to live in the North Delta
24 community of Walnut Grove and have happily done so for
25 31 years.

1 I have been retired for five years. My
2 background in public and private sector positions I
3 have held over 47-year professional career as set forth
4 in my written testimony.

5 These hearings are meant to address the
6 question: Do the proposed placement of three large
7 intake facilities in the North Delta to divert
8 9,000 cubic feet of water per second from the
9 Sacramento River and pour it into huge tunnels that
10 would carry it nearly 40 miles to the Clifton Court
11 Forebay harm the public interest?

12 As you deliberate on this question, please
13 consider that the legislature has provided some
14 instructive statutory guidance by way of the Delta
15 Reform Act of 2009.

16 Next.

17 (Exhibit displayed on screen.)

18 WITNESS STIRLING: The Delta Reform Act
19 declares two coequal goals for the Delta Tunnels
20 Project:

21 1. Providing a more reliable water supply for
22 Central and Southern California; and:

23 2. Protecting, restoring and enhancing the
24 deco -- the Delta ecosystem.

25 The Act also contains a mandatory condition

1 that is legally tantamount to a third coequal goal;
2 namely, that the two stated coequal goals, quote
3 (reading):

4 ". . . Shall be achieved in a manner that
5 protects and enhances the unique
6 cultural, recreational, natural resources
7 and agricultural values of the Delta as
8 an evolving place."

9 But what if the implementation of the two
10 stated coequal goals do not protect and enhance but,
11 instead, abuse and degrade those special and unique
12 characteristics of the Delta? Then the coequal goals
13 would not achieve its objective and the proposed Delta
14 Tunnels Project would fail to comply with the statute.

15 Nearly every resident, business owner and
16 farmer in the North Delta Legacy communities along the
17 Sacramento River, Freeport, Clarksburg, Hood,
18 Courtland, Locke, Walnut Grove, Ryde Isleton
19 justifiably believes that placement of the three huge
20 intakes in the North Delta and the Tunnels Project
21 altogether would reduce the special bucolic area to a
22 devolving place.

23 Here is an abbreviated depiction of how North
24 Delta residents and communities, as well as many
25 non-residents who drive through, service, recreate and

1 otherwise appreciate the Delta, would be harmed by the
2 Proposed Project.

3 First, time is a major factor in how this
4 outsized Project hovers like a dark, threatening cloud
5 over the people of the North Delta Legacy communities.

6 With several years of pending and future
7 antitunnel litigation in the State and Federal trial
8 and Appellate Courts, and the Project still largely
9 incomplete preliminary engineering, the Delta Tunnels
10 Project is many years from being construction ready.

11 Next.

12 (Exhibit displayed on screen.)

13 WITNESS STIRLING: In addition, the
14 Metropolitan Water District of Southern California's
15 July 2017 Program Schedule for the Project from start
16 to finish shows permits and staffing for its
17 construction would take 1.3 years, design would take
18 four years, construction would take 13 years, including
19 seven years for the three intake facilities, followed
20 by commissioning that would take one year for a total
21 construction process of 18 years.

22 Assuming no significant delays due to
23 unforeseen problems during the 18-year construction
24 phase, which is unlikely considering the immensity,
25 complexity and duration of the Project, it could be

1 2040 or later before the Project could be completed,
2 during which the people of the North Delta communities
3 would be mentally, emotionally and physically
4 challenged.

5 Next.

6 (Exhibit displayed on screen.)

7 WITNESS STIRLING: Our view, which is widely
8 accepted, is that the Delta -- California Delta,
9 especially the North Delta, is a unique natural
10 resource asset that is appreciated by residents and
11 visitors alike --

12 Next.

13 (Exhibit displayed on screen.)

14 WITNESS STIRLING: -- for its rural scenic
15 charm and beauty, its environmental diversity, and its
16 rich agricultural tradition.

17 We strongly resist any efforts to use the
18 Delta as an enormous plumbing experiment, which is how
19 we see the Project.

20 State Highway 160 runs atop the winding levee
21 road along the Sacramento River in the North Delta for
22 over a hundred years. Its vineyards and wineries,
23 historic Victorian homes, event and recreational venues
24 and farming operations with hundreds of acres of highly
25 productive agri -- agricultural land, make for the

1 quintessential image of, quote (reading):

2 ". . . The unique cultural, recreational,
3 natural resources and agricultural values
4 of the Delta."

5 It is also a major daily travel route for
6 thousands of vehicles of all types from Freeport just
7 south of Sacramento over to Antioch where it joins
8 major highways to the Bay Area.

9 We oppose construction of the three proposed
10 intake facilities because they would severely degrade
11 and drastically change the character of the North Delta
12 in each of the following ways:

13 Next.

14 (Exhibit displayed on screen.)

15 WITNESS STIRLING: 1. Each intake facility
16 would occupy almost 90 acres of land.

17 Here is a simulation image of what a 90-acre
18 intake facility would look like. Each intake facility
19 would be 4,000 -- would be 4,500 feet long, almost
20 7/8ths of a mile along the river's edge.

21 Next.

22 (Exhibit displayed on screen.)

23 WITNESS STIRLING: All three of these huge
24 intakes, taking almost 3 miles, would be situated
25 within a rural five-mile stretch of Highway 160. This

1 alone would severely and permanently degrade the North
2 Delta.

3 2. These huge intake facilities would
4 directly and heavily impact the small nearby North
5 Delta Legacy communities of Clarksburg, Courtland and
6 Hood.

7 3 --

8 Next.

9 (Exhibit displayed on screen.)

10 WITNESS STIRLING: At each of the three
11 unsightly intake facilities, Highway 160 and the levee
12 itself would be altered and relocated to 200 --
13 220 feet further inland and within the intake
14 structures, and this Highway 160 and levee relocation
15 would be permanent.

16 Next.

17 (Exhibit displayed on screen.)

18 WITNESS STIRLING: 4. Again, construction of
19 the three intake facilities with coffer dams alone
20 would take at least seven years.

21 The construction of the three intake
22 facilities with coffer dams would require the use of
23 many large pieces of voice -- of very noisy
24 earth-moving equipment, including cranes, evac --
25 excavators, graders, bulldozers and large hauling

1 trucks.

2 Next.

3 (Exhibit displayed on screen.)

4 WITNESS STIRLING: As this site shows, most of
5 the roar of these very noisy construction equipment,
6 including the obnoxious bell-ringing sound of this
7 equipment when backing up, would occur at any time of
8 day or night.

9 6. While the proponents declare that noise
10 abatement techniques will be utilized, it comes with
11 the caveat that, I quote (reading):

12 "Abatement measures will not be
13 available in all situations to reduce
14 construction noise to levels below the
15 applicable thresholds."

16 The proponents recognize that, quote
17 (reading):

18 "This noise impact will, therefore,
19 be significant and unavoidable."

20 Of major concern is the noise erupting from
21 the sharp, high-pitched metal-to-metal strikes of the
22 hammer-built pile drivers.

23 While the proponents claim that such pile
24 driving would occur only between dawn and sunset, this
25 timeframe would be nonetheless harmful.

1 Next.

2 (Exhibit displayed on screen.)

3 WITNESS STIRLING: To give you some feel for
4 the impact of pile-driver strikes, for all locations
5 where pilings are called for, the major -- the majority
6 of which are the North Delta intakes, calculations
7 indicate that the total number of pile-driver strikes
8 could exceed 30 million. As you can see, most of these
9 piles would be driven by hammer pile drivers.

10 The incessant high-decibel strikes from
11 multiple hammer -- hammer pile drivers operating
12 simultaneously would harm restaurants and other
13 establishments in their business operations or even
14 maintaining their customers or employees due to the
15 severe discomfort they would impose.

16 Notwithstanding, the proponents claim that
17 schools would not be affected by the high-decibel noise
18 from the hammer pile-driver strikes.

19 We fear that our schools in Clarksburg and
20 Courtland and Walnut Grove are near enough to multiple
21 hammer pile driving working simultaneously, that
22 maintaining the students' focus in the classrooms and
23 in other school activities can present a significant
24 challenge.

25 The sheer amount of high-decibel noise caused

1 by all the heavy equipment working on the intakes over
2 such a long period of time would play havoc with
3 north -- with North Delta residents' daily lives day
4 and night.

5 Recognizing that sound travels further at
6 night, even getting to a full and decent night's sleep
7 would become a challenge for North Delta residents.

8 7. Based on the Final Environmental Impact
9 Report statement that full-time employment of Delta
10 tunnels -- Delta tunnel workers would be 2,437 in
11 year 3 of construction, and 8,673 in year 12, it
12 appears certain that multithousands of workers will be
13 employed over the course of the Project's 13-year
14 construction?

15 CO-HEARING OFFICER DODUC: Mr. Stirling, I'm
16 going to stop you for a second.

17 WITNESS STIRLING: Sure.

18 Miss Ansley.

19 WITNESS STIRLING: Oh.

20 MS. ANSLEY: Yes. I'd like to . . .

21 I guess I'm interposing an objection.

22 I've been listening to the testimony. It is
23 largely following the testimony of Mr. Stirling, I
24 understand.

25 I would like to interpose here an objection as

1 more of a caution. There have been certain things that
2 are strained from the direct testimony; for example,
3 the representation that sound travels further at night,
4 the high decibels. There have been a number of
5 characterizations that stray from this.

6 I'm happy to let Mr. Stirling go on and
7 summarize, but I should like a caution that if it
8 starts -- if it continues to be off the -- the direct
9 testimony, then I will have to stand up and start
10 objecting.

11 Thank you.

12 CO-HEARING OFFICER DODUC: Okay.

13 Acknowledged.

14 WITNESS STIRLING: Because there is so little
15 available housing in the small North Delta communities
16 to accommodate these thousands of workers over 13 years
17 of construction, most of them would be traveling to,
18 through and from the construction worksites or staging
19 areas through these communities at all times of the day
20 and night.

21 It doesn't take much imagination to recognize
22 that the constant presence and movement of thousands of
23 out of area workers in and through the north -- rural
24 North Delta communities would have a deleterious impact
25 on these small communities.

1 Proponents' findings also state, quote
2 (reading):

3 "The increase in noise levels from
4 workers' vehicles would be significant
5 and exceed the Project's threshold for
6 traffic noise."

7 8. Construction of the tunnels would entail
8 large barges, powerful cranes and huge trucks
9 continuously transporting --

10 Next.

11 (Exhibit displayed on screen.)

12 WITNESS STIRLING: -- massive tunnel --

13 Next.

14 -- massive tunnel boring equipment capable of
15 boring 40 feet-in-diameter tunnels and --

16 Next.

17 (Exhibit displayed on screen.)

18 WITNESS STIRLING: -- the heavy concrete
19 tunnel segments to the numerous previously bored tunnel
20 shafts and a continuous flow of heavily loaded trucks
21 transporting dirt and muck to other locations within
22 the Delta.

23 These large pieces of equipment would travel
24 over the same 100-year-old two-lane Delta roads and
25 bridges as all everyday Delta traffic.

1 The North Delta roads and bridges, most of
2 their current conditions rated deficient in the Final
3 Environmental Impact Report study, would be at risk
4 from a 13 years of continuous heavy equipment traffic.

5 With all of this geohydrological mayhem going
6 on, the tunnels' construction would impose major and
7 long-term hardship on the everyday vehicu -- vehicular
8 traffic of Delta residents and daily travelers who
9 regularly pass through the North Delta on their way to
10 or from the Bay Area or to or from Sacramento.

11 School buses, commercial delivery trucks,
12 garbage, green waste and recycling trucks, utility
13 company trucks, and numerous commercial vehicles would
14 be seriously impaired and obstructed in their
15 deliveries and services.

16 As a major vital agricultural area, large
17 slow-moving farm equipment, agricultural, chemical
18 vehicles, and many large produce-hauling trucks that
19 routinely use Highway 160 and other North Delta
20 roadways would be severely impaired by the multitude of
21 construction equipment and dirt- and muck-hauling
22 trucks.

23 My colleague Daniel Wilson and Sarah Hemly
24 will speak more on this subject.

25 Human life and safety in the North Delta

1 communities would be a significant risk for each
2 community's Fire Department personnel, whose normal
3 first responder workload is 70 percent medical calls,
4 and Sheriff's deputies and CHP officers who provide law
5 enforcement are delayed due to detours, road blockages
6 or long traffic lines caused by the tunnels'
7 construction.

8 Next.

9 (Exhibit displayed on screen.)

10 WITNESS STIRLING: In conclusion, the North
11 Delta as a place of scenic beauty and rural charm --

12 Next.

13 (Exhibit displayed on screen.)

14 WITNESS STIRLING: -- would suffer greatly
15 from the Project's 13 or more years of construction.

16 Next.

17 (Exhibit displayed on screen.)

18 WITNESS STIRLING: We who live, work and farm
19 in the North Delta are being asked to endure this
20 mega-invasive infrastructure Project with years of
21 incessive high-decibel noises degrading our businesses
22 and home life --

23 Next.

24 (Exhibit displayed on screen.)

25 WITNESS STIRLING: -- the visual degradation

1 of our communities, the increase in air pollution, the
2 loss of recreational opportunities and tourism, the
3 severe disruption of our roads and waterways, and the
4 frustration of our agricultural industry.

5 This invasion would erode the spirit and
6 economies of our communities and our daily lives. We
7 should not be burdened with these heavy impositions
8 that would render the Delta a devolving place and
9 vastly harm our share of the public interest.

10 Thank you for your attention and
11 consideration.

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

14 MS. MESERVE: And we will now go to
15 Dr. Shilling.

16 And just to confirm, Dr. Shilling: Is
17 LAND-135 a true and correct copy of your testimony?

18 WITNESS SHILLING: Yes. Thank you.

19 MS. MESERVE: And then is LAND-136 a true and
20 correct copy of your Statement of Qualifications?

21 WITNESS SHILLING: Yes.

22 MS. MESERVE: And then are Exhibits LAND-138
23 to 187 and LAND-121 true and correct copies of
24 materials that you relied upon in preparing your
25 testimony?

1 WITNESS SHILLING: Yes. Yes.

2 MS. MESERVE: Please go ahead and --

3 CO-HEARING OFFICER DODUC: Is your microphone
4 on, Dr. Shilling?

5 WITNESS SHILLING: Now it is. Sorry.

6 MS. MESERVE: And he does have a .pdf
7 compilation which should marked "Shilling."

8 Please go ahead and summarize your testimony,
9 Dr. Shilling.

10 WITNESS SHILLING: Okay. Thank you.

11 And actually I also have the slide
12 presentation, LAND-137.

13 Would you mind pulling that up as well.

14 MS. MESERVE: I guess I should add: The
15 LAND-137 is a true and correct copy of your PowerPoint
16 presentation?

17 WITNESS SHILLING: Yes, it is. Thank you.

18 CO-HEARING OFFICER DODUC: So let me
19 understand correctly, Miss Meserve.

20 LAND-137 is Dr. Shilling's PowerPoint and the
21 other document is just a compilation of documents
22 already in the record that you compiled for ease of
23 access.

24 You did not make any further changes to those
25 documents.

1 MS. MESERVE: No, we did not.

2 And we've also marked the top of each of those
3 pages with the citation and where it's referenced as
4 well.

5 Dr. Shilling, I believe, needs to go back and
6 forth a tiny bit between the -- the figures in his
7 PowerPoint, but I think he'll mostly be on the
8 compilation if that's okay with you.

9 MS. ANSLEY: And is the --

10 CO-HEARING OFFICER DODUC: I believe that's
11 what Mr. Stirling did very effectively.

12 MS. ANSLEY: Is the compi --

13 CO-HEARING OFFICER DODUC: Miss Ansley.

14 MS. ANSLEY: What is the LAND number for the
15 compilation?

16 MS. MESERVE: This is recirculated for the
17 convenience of the parties. It doesn't have an
18 evidentiary depiction. Each item is from exhibits that
19 are going to be presented in evidence.

20 So at this point, I wasn't necessarily going
21 to submit it as evidence in itself. It's more for the
22 purpose of the testimony.

23 MS. ANSLEY: And these are compilations that
24 are -- These are slides that are expressly referenced
25 in his testimony by page -- by page number. It's not

1 like you pull up one page from a very large document.
2 This is, like, it's Page X that he cites in his
3 testimony; is that correct?

4 MS. MESERVE: I believe that an expert may
5 rely on any -- I don't think that a specific pin cite
6 would have been necessary within the testimony for him
7 to rely on it. That gets to a detail I think we
8 discussed in Part 1.

9 So, yes, we provided those yesterday. So if
10 you had a chance to take a look at them, if you had any
11 specific questions, I could try to answer them.

12 MS. ANSLEY: Well, what I'm wondering is --
13 Yes, he may rely on a document. But in terms of
14 calling it a specific figure and presenting an opinion
15 on it, that not necessarily was the subject of direct
16 testimony in his case in chief, then I will have,
17 obviously, a problem on it.

18 And I will look for the compilation you said
19 you circulated yesterday? That will not be admitted
20 into evidence.

21 MS. MESERVE: Right.

22 CO-HEARING OFFICER DODUC: And, Miss Ansley,
23 to the extent that you wish to object, you also have
24 the option of, upon the conclusion, to move to strike
25 portions of the transcript if you feel it's beyond the

1 scope of the written direct testimony.

2 MS. ANSLEY: Yeah.

3 CO-HEARING OFFICER DODUC: And, of course,
4 Miss Meserve will have the opportunity to respond to
5 that.

6 MS. ANSLEY: Right.

7 And I -- And my understanding is,
8 Miss Meserve's last witness will be going as part of a
9 panel in maybe sixth in order now, which would be
10 Russell Van Loben Sels -- Loben Sels? And I believe
11 that she will not be admitting her testimony -- her
12 exhibits into evidence until that point.

13 And so I would like to reserve, once I see
14 this presentation with Dr. Shilling speaking, the right
15 to object to any testimony that is beyond the scope of
16 his direct.

17 CO-HEARING OFFICER DODUC: Understood.

18 MS. ANSLEY: Thank you very much.

19 WITNESS SHILLING: All right. Thank you very
20 much, Board Members and others present.

21 I'm going to talk about four different areas
22 related to the Twin Tunnels Project. And I'm going to
23 have my slide presentation arranged in those four
24 areas, and they're labeled A, B, C, D.

25 And so that's why I have -- I would like to go

1 back and forth, and so it's organized in that way
2 rather than a long narrative, which I think is harder
3 to follow.

4 Would you mind putting the next slide?

5 (Exhibit displayed on screen.)

6 WITNESS SHILLING: Thank you.

7 So I received my Ph.D. from the University of
8 Southern California in 1991.

9 Since then, a lot of my research has been
10 related to water, human uses of water, human impacts on
11 water, both water amounts, water supply and water
12 quality, and then benefits we derive from water,
13 including fish, agricultural activities, economic
14 benefits, et cetera.

15 I also work in transportation and co-direct
16 The Root Ecology Center of U.S. Davis, and that brings
17 in a different kind of understanding about human
18 interactions with the environment. In both areas,
19 the -- the focus is how we use and potentially impact
20 the environment.

21 And quite often, it's also how we impact
22 ourselves. And so there's a human community side to
23 this as well and part of my research.

24 In this work, I've worked with a lot of
25 different entities, and those may come up during some

1 of the questions or -- or some of the things I say.

2 Next slide, please.

3 (Exhibit displayed on screen.)

4 WITNESS SHILLING: So these are the four areas
5 I'm going to talk about, and I just represented them
6 with figures -- with diagrams and maps.

7 So the one at the top in the center is related
8 to water sustainability, and that is from the
9 Department of Water Resources Water Plan 2013 Update.

10 The one to my right, which you all have it on
11 the screen in front of you, so that is a noise
12 propagation map in the North Bay that I developed a few
13 years ago. And it was a combination of noise impacts
14 on -- on different habitats and also different
15 communities in the North Bay, San Pablo Bay.

16 The diagram in the center at the bottom is
17 from a partnership with Santa Ana Watershed Project
18 Authority, and it was part of the Water Plan 2013
19 update work. And so it's looking at regional
20 sustainability, regional planning, and how you bring in
21 environmental information into reasonable planning.
22 And that specific diagram is related to groundwater
23 nitrate contamination.

24 And then the -- the map to the left is just a
25 map of wildlife occurrences in the Delta. It's only

1 meant to be a reference point to -- I'm going to
2 discuss wildlife movement in the Delta in a general
3 way, so it's not just related to listed species.

4 Okay. Go to the next slide, please.

5 (Exhibit displayed on screen.)

6 WITNESS SHILLING: And then, at this point,
7 this is where I have each of the four sections.

8 The first one I'm going to talk about is
9 wildlife movement. And I'm going to talk about it in a
10 regional sense and how the Project, because it goes
11 north to south through the Delta Region and ecosystem,
12 how it might impact wildlife movement.

13 And I'm going to talk about it from the point
14 of view of construction because it's such a long
15 construction period, and also long-standing impacts,
16 and primarily from the point of noise and light as the
17 mechanisms by which wildlife movement or wildlife
18 occupancy might be disturbed.

19 And so if we could skip over to the .pdf
20 compilation.

21 (Exhibit displayed on screen.)

22 WITNESS SHILLING: There we go. Thank you.

23 So this -- this map is used a fair amount and
24 it shows the Project area. In this case, it's showing
25 the north end where there's a lot of initial

1 construction activity of the intakes. And the contours
2 there, the colored lines, represent noise propagation.

3 And it's the -- from the FEIR and represents
4 the propagation of noise from construction across the
5 landscape.

6 In the case of wildlife --

7 And if we were to zoom down a little bit, I
8 think.

9 (Exhibit displayed on screen.)

10 WITNESS SHILLING: -- you can see that there's
11 different scales of -- of operation. And this is the
12 estimate of how far out potentially disturbing sound
13 would go.

14 It assumes that the initial . . . estimation
15 of noise at the point in the middle of those circles is
16 correct, is -- So this is all a model. This is not
17 measured. This is predicting what the effects might
18 be.

19 As I'll talk about later, I believe that the
20 modeling was not done correctly because the initial
21 noise volume that was used is too low. That noise
22 volume for construction is not given, but, by using the
23 contours, I back calculated what it would be and it
24 seemed that they underestimated the -- the noise
25 volume -- the noise level that would contribute to the

1 impacted area.

2 Regardless of that, if you were to look at the
3 whole Delta, the construction noise from building the
4 intakes, the tunnel shafts, the roads, access roads,
5 the transmission lines, over the 13- to 14-year period
6 would impact most of the Delta from the north-south
7 direction.

8 Next slide, please.

9 (Exhibit displayed on screen.)

10 WITNESS SHILLING: Thanks.

11 ~~And -- And so, if you look in this area in
12 particular, you can see that the overlapping effects of
13 all of those different kinds of construction, when you
14 think about this from a noise and light and disturbance
15 point of view, we basically have created a barrier
16 across the Delta for wildlife to move from east to west
17 back and forth.~~

18 Next one, please.

19 (Exhibit displayed on screen.)

20 ~~WITNESS SHILLING: To give us an idea of --
21 These are just examples I've pulled from the variety of
22 exhibits that I included in my direct testimony.~~

23 ~~And this shows the change in bird species
24 richness between areas as far as -- close to roads as a
25 source of noise and far away.~~

1 ~~And so the -- the graph that's labeled B, it~~
2 ~~shows box plots. And on the X-Axis, you can see near~~
3 ~~and far, near and far, for two kinds of forest. The~~
4 ~~Y-Axis is in -- in the number of species. And in both~~
5 ~~cases, the presence of birds is negatively affected by~~
6 ~~highway noise.~~

7 ~~Now, that's one source -- one type of machine~~
8 ~~noise. There are other kinds of machine noise that~~
9 ~~could affect species.~~

10 CO-HEARING OFFICER DODUC: Mr. Shilling, let
11 me ask you to wait for a minute.

12 WITNESS SHILLING: Yes.

13 CO-HEARING OFFICER DODUC: Miss Ansley.

14 MS. ANSLEY: Yes. I'd like to lodge a couple
15 objections at this point.

16 I'd like to start with the previous map where
17 he was talking about overlapping layers of noise. I
18 don't believe that these figures are explicitly
19 referenced and I don't remember testimony explaining
20 anything about overlapping noise barriers causing some
21 sort of bar to movement.

22 Now, I understand that Dr. Shilling generally
23 is speaking about movement impacts, but I do not
24 believe that he reached the level of specificity that
25 he did in that prior graph, which I don't believe is

1 referenced in his testimony on Pages 2 to 3.

2 Now, moving on to this plot --

3 CO-HEARING OFFICER DODUC: Hold on. Hold on.

4 MS. ANSLEY: Pardon me.

5 CO-HEARING OFFICER DODUC: Let's -- Let's not
6 move on.

7 Dr. Shilling, or Miss Meserve, could one of
8 you direct me to where that plot is mentioned in
9 Dr. Shillings' testimony.

10 WITNESS SHILLING: Are you referencing this
11 graph or the previous graph?

12 CO-HEARING OFFICER DODUC: No, the previous
13 one.

14 WITNESS SHILLING: Okay.

15 MS. ANSLEY: That one.

16 WITNESS SHILLING: Would you like me to go and
17 look for the --

18 CO-HEARING OFFICER DODUC: (Nodding head.)

19 WITNESS SHILLING: Okay.

20 MS. MESERVE: Just so I can understand the
21 objection:

22 We've cited it, and the concern was that
23 additional comments are made besides what's in the
24 testimony that's written? Is that . . .

25 MS. ANSLEY: Well, so here's my concern:

1 I don't see this specific figure referenced.

2 And I see in the written testimony --

3 MS. MESERVE: I think there is reference.

4 MS. ANSLEY: -- and I --

5 CO-HEARING OFFICER DODUC: Hold on.

6 MS. ANSLEY: And I'm waiting --

7 CO-HEARING OFFICER DODUC: One at a time.

8 Where is the specific reference, Miss Meserve?

9 MS. MESERVE: Line 22 of Page 4.

10 I mean, it's right at the top of the slide

11 also.

12 MS. ANSLEY: I'm sorry. Line 22 of Page 4 is

13 a section on human impacts?

14 CO-HEARING OFFICER DODUC: Um-hmm. Of course.

15 Noise.

16 CO-HEARING OFFICER MARCUS: You would say

17 that.

18 CO-HEARING OFFICER DODUC: I don't like noise.

19 (Laughter.)

20 MS. ANSLEY: And here is my general concern:

21 This is -- Well, this is obviously cited in a

22 different section and is impact on birds.

23 And my concern is that the testimony provided

24 in relation to this figure was more technical and more

25 detailed than the general conclusions he draws in his

1 testimony.

2 So his -- his interpretations of these figures
3 is, in a sense, outside the scope of his direct
4 testimony. And I think that that is better illustrated
5 even by his now progression to the next whisker and bot
6 plot -- box plot where he was talking about impacts on
7 diversity of bird species, which I do not believe he
8 talked specifically about impacts to diversity of bird
9 species.

10 That said, I am acknowledging that he's
11 talking -- made a general conclusion about an impact
12 generally to movement of wildlife, but he provides no
13 technical analysis of -- of that that would incorporate
14 the kind of testimony he's starting down the road to do
15 here.

16 CO-HEARING OFFICER DODUC: Let me suggest --

17 WITNESS SHILLING: Can I address the original
18 question?

19 CO-HEARING OFFICER DODUC: I'm sorry?

20 WITNESS SHILLING: Can I address the original
21 question?

22 CO-HEARING OFFICER DODUC: Sure.

23 WITNESS SHILLING: Okay.

24 CO-HEARING OFFICER DODUC: So what was the
25 original question?

1 WITNESS SHILLING: The original question was
2 about the use of the map to talk about multiple sources
3 of disturbance for east-west movement through the
4 Delta.

5 And the -- So it's -- it's -- it's from one of
6 the exhibits. It's meant to illustrate that part of
7 the Delta. And I think that I reference a similar map
8 on a different page, on Page 2, Line 23.

9 But the -- the larger point of addressing
10 overlapping sources of disturbance, those are talked
11 about in Pages -- on Page 2 of my testimony, the
12 paragraphs there starting on Line 9, and the paragraphs
13 starting on Line 19. And then there's direct reference
14 to birds on Page 3, Line 16 and Line 23.

15 MS. ANSLEY: And I acknowledge the conclusions
16 he's pointing out that mention the word "birds," and
17 impacts to birds.

18 I would note that the reference on Page 2 is
19 to about 300 pages of Chapter 12 in the FEIS so --

20 CO-HEARING OFFICER DODUC: Miss Ansley,
21 Miss Meserve, let me -- let me do this.

22 I would like to get through this testimony.
23 And I recognize your right, Miss Ansley, to object to
24 anything that you believe to be outside the scope of
25 direct testimony.

1 I would, however, ask that you hold your
2 objection until he completes his testimony. And you
3 may have a chance to review his testimony, review what
4 was submitted in writing versus what he said orally
5 versus the PowerPoint versus the new compilation that
6 Miss Meserve has introduced, and prepare your written
7 objections to anything you believe is outside of the
8 scope --

9 MS. ANSLEY: Well, that --

10 CO-HEARING OFFICER DODUC: -- rather than
11 doing it --

12 MS. ANSLEY: I understand that the -- I mean,
13 yes, it is -- it is intrusive to make continuing
14 objections.

15 But I will put forward that -- that the rules
16 of presenting a case in chief are well known here.
17 We've had these similar problems before in Part 1.

18 And my concern is not only for the record but
19 also the scope of my cross-examination, because what
20 you're -- the process that you're suggesting will
21 require me to develop cross necessarily on the fly on
22 some of these very technical points on the -- on the
23 off chance that my Motion to Strike would not be
24 granted.

25 So I would have -- Right now, I have to deal

1 with testimony that is in some -- a lot of ways going
2 to be more technical and new to me that I have not the
3 chance to adequately prepare for.

4 So I actually think that -- Though I
5 acknowledge that it is a large pain for me to stand up
6 and object when witnesses go off the scope of their
7 direct, and I tried to give a lot of leeway to
8 Mr. Stirling, obviously, who was providing his
9 testimony on legacy and the Delta agriculture.

10 But I feel that, with a technical witness,
11 I -- I think that is too much of a burden on the
12 Department of Water Resources to have that -- to have
13 that burden during cross-examination and then to have
14 to clean the record up later basically.

15 And so --

16 CO-HEARING OFFICER DODUC: All right.

17 Let's --

18 MS. ANSLEY: -- I do object.

19 CO-HEARING OFFICER DODUC: Let's -- Let's hold
20 on.

21 Hold on, Mr. Keeling. There are others lining
22 up to come to your aide, I'm sure, so let's hear from
23 them.

24 Miss Des Jardins, it was such a quiet morning.
25 Welcome.

1 MS. DES JARDINS: Yes.

2 I just note that DWR argues one way for their
3 case in chief, that Government Code 11513, which is the
4 more relaxed APA standards, govern their testimony and
5 their evidence, and then when we get to Protestants'
6 testimony, all of these trial-like objections.

7 And this is not a trial. The governing
8 procedures explicitly incorporate Government Code
9 11513. The only trial standards are Evidence Code 801
10 and 805.

11 And this Board does have a discretion to
12 receive evidence without these kinds of hypertechnical
13 objections.

14 And to the extent it significantly gets beyond
15 what he submitted and it really is surprise
16 testimony -- and I think there's a genuine objection --
17 but popping up every -- every few slides and making
18 objections just impedes the flow of testimony and . . .

19 Generally, I object. I think there should be
20 one standard for this entire hearing, and it should be
21 consistent. And to the extent DWR is arguing both
22 sides inconsistently in this hearing, I'm making a
23 standing objection to that as unethical.

24 CO-HEARING OFFICER DODUC: Mr. Jackson.

25 MR. JACKSON: Basically I'm going to be

1 that DWR and the Bureau similarly did not present
2 PowerPoints but, in Part 1, tried to present
3 compilations of exact pictures of their testimony
4 and -- and the exact manner here citing back.

5 And where the objections of Protestants were
6 disallowed from using those, even though it was
7 inconvenient, and we had to pull up a lot of things.

8 I did not note that because I personally think
9 that it is more efficient to be able to do this. But
10 in this instance, it seems like these figures are being
11 described more and causing the testimony to be expanded
12 beyond the written testimony.

13 CO-HEARING OFFICER DODUC: All right. If the
14 peanut gallery's done, let's now turn to the attorneys.

15 Mr. Keeling, and then Miss Meserve.

16 MR. KEELING: I do not recall as Protestants
17 and Protestants' counsel sat out here see the profound
18 disagreement over the direct testimony of DWR's
19 witnesses in Part 1 and Part 2. I do not recall this
20 degree of interference with the actual direct
21 testimony.

22 We reserved our powder for cross where it
23 belongs. We reserved our powder for formal objections
24 where they belong.

25 But when those objections get in the way of

1 the direct testimony in this setting, which the Hearing
2 Officers have created, it simply -- it simply stops the
3 train, and I think it's wrong. I think it's
4 discourteous. I think it's unprofessional.

5 CO-HEARING OFFICER DODUC: Miss Meserve.

6 MS. MESERVE: Just as a one further bit of
7 explanation:

8 I believe this was done in Part 1 by DWR
9 toward the end. And it was my recollection that that
10 was allowed and that's part of why I -- I went this
11 direction in terms of trying to facilitate the -- the
12 presentations of the witnesses.

13 And then I was also very adamant with my
14 witnesses that they not read their testimony because I
15 knew that would be boring and that the Hearing Officers
16 had specifically said not to.

17 So what they've done is done their best to
18 summarize the testimony and then also refer to things
19 that are cited in order to better explain, you know, to
20 sum -- hopefully summarize and not go through every
21 single line of the testimony, because we want to be
22 able to tell our story about what the impacts on our
23 community are, and that's why we're here.

24 So, we've done the best we could to try to
25 comply with everything. And I guess I would just say,

1 if there's specific objections -- I know that we were
2 not allowed to object in writing before, you know, as
3 the evidence came in in the fall. We did it a little
4 different this time.

5 And I am certainly willing to entertain
6 whatever objections DWR and others may have, but I
7 think it would be best to defer that out to a writing
8 maybe after the transcript is available and then we
9 could actually interface about what actually occurred.

10 And that's -- I guess, would be my suggestion,
11 which is sort of a hybrid maybe of the way you had -- I
12 don't know -- decided to deal with objections this time
13 around.

14 CO-HEARING OFFICER DODUC: Final, final
15 comment, Miss Ansley.

16 MS. ANSLEY: Yes. I mean, I think it's --
17 it's actually pretty simple.

18 I object to -- These could have been included
19 as PowerPoint presentation, the representations he
20 makes about these particular figures, putting
21 statements in his direct testimony.

22 I think that I'm fine with him summarizing his
23 testimony to the extent he stays within the figure
24 cites he makes in his testimony and the exact
25 conclusions he reaches in his testimony.

1 But I don't that think I'm out of bounds
2 objecting to the inclusion of figures that are not
3 expressly referenced in support of the conclusions he's
4 making, and I do not think that I'm out of bounds when
5 he's making conclusions beyond the scope of his direct.

6 And I do object to having to clean that up on
7 the back end past the time that my ability to
8 cross-examine these witnesses has occurred.

9 So I do think that I understand that it is
10 inconvenient, and I did try to let it go with -- with
11 the earlier witness.

12 But when we get to very technical witnesses,
13 whose testimony is on specific impacts, I do have a --
14 a big issue with things that go beyond the scope of
15 their direct. And I do think there's a distinction to
16 be made there between this witness and perhaps the
17 prior witness.

18 CO-HEARING OFFICER DODUC: All right. We're
19 going to take a break to consider that.

20 We will return at 2:20.

21 MS. MESERVE: May I just add one clarification
22 on the citations.

23 I believe in Part 1 -- and I can't -- it may
24 have been in relation to Dr. Paulsen if I'm remembering
25 correctly -- but it was clear that the expert could

1 rely on anything within what she had cited more
2 generally.

3 So I -- I don't believe, you know -- So, for
4 instance, if a report is in LAND-161, and as long as
5 the ideas are within the testimony already, which as
6 Miss Ansley is pointing out, there is nothing wrong
7 with going to a specific figure within that LAND-161
8 and -- and talking about it within the scope of the
9 testimony.

10 I think we've already resolved that because,
11 you know, there aren't specific page number cites in --
12 always in this testimony or any of the Petitioners'
13 testimony.

14 CO-HEARING OFFICER DODUC: Miss Meserve, my
15 understanding of Miss Ansley's concern is not -- well,
16 not limited to the use of a figure but the conclusions
17 being drawn by the use of that figure, and the
18 conclusion being outside the scope of the direct
19 testimony -- of the written direct testimony.

20 MS. ANSLEY: Right.

21 And also the citation to figures that were not
22 cited in support of the conclusion in the testimony,
23 such that when I read a conclusion, I can go look up
24 the cite for that conclusion.

25 So I would -- I have a problem with -- with

1 figures showing up from large documents that were not
2 referenced specific -- with the specific assertion. I
3 do have problems with that.

4 CO-HEARING OFFICER DODUC: We will return at
5 2:25 now.

6 (Recess taken at 2:12 p.m.)

7 (Proceedings resumed at 2:30 p.m.):

8 CO-HEARING OFFICER DODUC: All right. It is
9 2:30, not 2:25, and we're back in session.

10 You gave us a lot of things to think about.

11 Dr. Shilling.

12 WITNESS SHILLING: Yes.

13 CO-HEARING OFFICER DODUC: With respect to
14 Miss Ansley's objection to the use -- Oh, could you --
15 Miss Gaylon, could you put this --

16 (Exhibit displayed on screen.)

17 CO-HEARING OFFICER DODUC: Yes.

18 -- to the use of this specific graphic in
19 connection to your oral testimony, we are sustaining
20 the objection.

21 And let me explain.

22 Dr. Shilling, in providing your oral
23 testimony, when referring to a figure and using that
24 figure to support a conclusion in your oral testimony,
25 please make sure that that same figure is cited in your

1 written testimony to support that same conclusion.

2 I think the problem we have here is that this
3 figure was citing -- cited in your testimony to support
4 conclusions with respect to human impacts and, in your
5 oral testimony, you might have used it in reference to
6 a different conclusion that was not in your written
7 testimony.

8 I don't know if I made it clear or worse, but
9 in moving forward, please make sure that any visual,
10 any graphics, that you pull up, first, that it is cited
11 in your written testimony, but it's cited in connection
12 to a conclusion or an opinion in your written testimony
13 that is the same as what you will be providing orally.

14 And do you need time to review your prepared
15 oral testimony with that direction in mind?

16 WITNESS SHILLING: I was doing that while you
17 guys were out.

18 But I have a clarifying question.

19 CO-HEARING OFFICER DODUC: Please.

20 WITNESS SHILLING: Okay. So the next page in
21 the .pdf compilation is a figure pulled from a
22 scientific paper which is cited and is a LAND exhibit.

23 And so it -- Are you suggesting that for
24 any -- that for any of these types of figures, which
25 are a little different from the EIR kinds of map that

1 was on the previous page, that these were cited
2 directly so it would be LAND-1 -- LAND-163, Figure 4?

3 Are you -- Are you suggesting that? Or is it
4 sufficient --

5 CO-HEARING OFFICER DODUC: Hold on.

6 WITNESS SHILLING: -- that it say just
7 LAND-163.

8 CO-HEARING OFFICER DODUC: First of all, I --
9 we did not get to Miss Ansley's objection on this graph
10 so we'll, I'm sure, hear from her.

11 What -- Just looking at this, what I am saying
12 is, your testimony should have a citation to
13 LAND-135 --

14 WITNESS SHILLING: LAND 163. Sorry. The red
15 writing is my direct and the LAND-163 is the actual
16 paper that the figure was derived from, and that's
17 LAND-163 cited in my direct.

18 CO-HEARING OFFICER DODUC: Okay. So, first of
19 all, the graphic has to be cited in your written
20 testimony. And then whatever opinion or conclusion you
21 offer in connection with these graphics should be
22 reflected as well in your written testimony.

23 In other words, don't pull up a graphic and
24 then cite an opinion or a conclusion that's not related
25 to that graphic as presented in your written testimony.

1 MS. MESERVE: Excuse me. I'm a little
2 confused by this direction.

3 It is contrary to the whole preceding hearing
4 process that there needs to be a specific citation in
5 order for a witness to be able to rely on the graphic.

6 For instance, in -- throughout Petitioners'
7 case in chief, they'll have a citation to a DWR exhibit
8 that may be, you know, a hundred or 200 pages long.

9 And certainly they may, you know, rely -- They
10 don't need to recite every single exhibit, nor have
11 they.

12 So I -- To the extent you're saying these
13 individual graphic needs to have been cited in order
14 for his conclusions that he's already stated to be made
15 now today, I think that is totally inconsistent with
16 the prior proceedings.

17 And then I would say also that we've provided
18 all this testimony and the exhibits in November. And a
19 lot of this stuff we've been arguing about was in DWR's
20 own case in chief in the Final EIR.

21 So, the idea that every single little tiny
22 thing needs to be pin cited within testimony, I don't
23 think is correct or consistent.

24 CO-HEARING OFFICER DODUC: It's not the
25 citation, I don't think, as much as the conclusion he

1 draws from that.

2 MS. ANSLEY: And I think I can actually
3 provide a little bit of a clarification --

4 CO-HEARING OFFICER DODUC: Please.

5 MS. ANSLEY: -- to my -- this -- Right.

6 So my specific problem with the graphic I
7 think illustrate this as well.

8 So -- And I do believe that, just as an
9 outside, that the Petitioner may have cited, let's say,
10 to a chapter in the EIR/EIS but certainly when they
11 showed graphics in their direct testimony, they were
12 graphics that were provided as part of the testimony,
13 as part of the case in chief.

14 Now, this figure supports a sentence at
15 Lines 4 to 5 that reads (reading):

16 "Traffic noise greater than
17 44 decibels has been shown to explain
18 variation in bird -- forest bird
19 distribution."

20 That's fine. I see that conclusion, and I see
21 the general cite to this paper.

22 What I do have a problem with is that there
23 was no citation to the specific figure. And when this
24 was called up, Dr. Shilling started expounding on bird
25 species richness.

1 Now, I do not mind him making the conclusion
2 that he makes in that sentence orally, but what I mind
3 is additional technical testimony on bird species
4 richness as interpreted in this figure. That is beyond
5 the scope of what that sentence says.

6 So I think there's a fine distinction between
7 Miss -- between what Miss Meserve is saying. An expert
8 certainly may rely on paper in reaching his
9 conclusions, but they may not provide further technical
10 support for the conclusion that they do not provide in
11 their case in chief, and I think that's the dividing
12 line here?

13 CO-HEARING OFFICER DODUC: Is that better?

14 MS. MESERVE: I understand.

15 CO-HEARING OFFICER DODUC: Oh, good.

16 MS. ANSLEY: So I have no problem with him
17 reading summaries of his conclusions from his testimony
18 or out loud saying, "And this is supported by
19 LAND-163" -- my glasses are off -- "LAND-163, a paper
20 by so and so," but I do have a problem with opening up
21 specific graphics in that paper and expounding --

22 CO-HEARING OFFICER DODUC: And expounding upon
23 it.

24 MS. ANSLEY: -- and expounding upon the
25 sentence that is in this testimony.

1 At this point, on cross-examination,
2 certainly, if I asked him about bird species richness,
3 an expert may rely on these sort of documents and he
4 could open it up if I asked him about bird species
5 richness and explain himself using this figure.

6 So I think there's a difference between direct
7 case in chief and an expert providing his ex -- his
8 explanation on cross-examination when we expound
9 normally.

10 CO-HEARING OFFICER DODUC: Dr. Shilling, did
11 you get all that?

12 WITNESS SHILLING: Yeah, I did.

13 CO-HEARING OFFICER DODUC: Okay.

14 WITNESS SHILLING: And the direct says "forest
15 bird distribution," which is a term of art, which
16 refers to distribution of species over space, which is
17 what that is.

18 So the terms of art are going to show up, and
19 we may have to work through them, but there's not an
20 inconsistency.

21 In terms of the graphics, I guess I'll skip
22 the -- You're saying that I should skip anything that
23 looks like this, which is -- are graphics pulled from
24 exhibits --

25 CO-HEARING OFFICER DODUC: I guess what I'm --

1 WITNESS SHILLING: -- because the remainder
2 look like this. They're graphics pulled from exhibits
3 and cited in the direct.

4 MS. ANSLEY: I think what I'm saying is that I
5 didn't receive any interpretation of this figure in his
6 testimony or the conclusions you drew from this figure.

7 So I object to now opening it up on direct and
8 having you describe the box whisper plots of this
9 figure. And -- And your conclusion about bird specie
10 richness that led to the conclusion in your testimony,
11 which is quite -- The conclusions in this testimony are
12 quite general, which is why I'm having a problem with
13 this embellishment.

14 CO-HEARING OFFICER DODUC: I'm surrounded by
15 lawyers. Somebody step in, please.

16 MS. MESERVE: I think the -- the statement he
17 made is explained by these figures. I really don't see
18 what the problem is.

19 I feel like this is more about obstruction
20 than about some kind of real issue with the testimony
21 being provided today, and I wish we could proceed with
22 it.

23 MS. ANSLEY: My objection stands. I think
24 that --

25 CO-HEARING OFFICER DODUC: So your

1 objection --

2 MS. ANSLEY: I would like to move to strike
3 his testimony on bird species richness. I do believe
4 that this figure is improper, and I do not think that
5 he should be providing a now interpretation of this
6 figure in light of his one-sentence testimony on bird
7 species richness in forests.

8 That is an explan -- That is a further
9 explanation than what he's providing in his direct
10 testimony and may be further conclusions in support
11 that I was not privy to.

12 MR. DEERINGER: And just to be clear for the
13 record, this is -- this is a distinct objection from
14 the one -- from the earlier figure.

15 MS. ANSLEY: Well, I think that the problem
16 that we're struggling with here is, I think that we're
17 on a pattern. He is not just summarizing his direct
18 testimony. He's pulling up graphics that we were only
19 provided with at 4:55 at night.

20 MS. MESERVE: That's not true.

21 MS. ANSLEY: Oh, I'm sorry.

22 MS. MESERVE: They were provided in November.

23 MS. ANSLEY: He's providing us specific graphs
24 that he's going to provide information on at 4:55 last
25 night; to wit, these slides, I guess.

1 And they could have obviously been provided in
2 his -- referenced in his testimony and provided as part
3 of his PowerPoint. But now we're just sort of
4 struggling to listen very carefully when he's not
5 summarizing his testimony to what he is adding.

6 And I would reserve -- make a motion now to
7 reserve the right to have continued cross-exam, because
8 I would like -- in this case, I would have a bird
9 expert listening to help me respond to any assertions
10 that he might make, whereas I'm prepared with the
11 conclusions that he made in his direct testimony, of
12 course.

13 MR. KEELING: Miss Ansley has inadvertently
14 supported my position that this is better heard after
15 the direct.

16 And if she has a series of objections at this
17 level of detail, and if we want to get through this
18 hearing, she should put them in writing and we could
19 have it out later.

20 MS. ANSLEY: I don't believe that's what I
21 said. I said I reserve the right for further
22 cross-examination.

23 CO-HEARING OFFICER DODUC: I understood.

24 Final word, Miss Meserve?

25 MS. MESERVE: I would just point out that the

1 first two sections of Dr. Shillings' testimony, one
2 relates to wildlife and another relates to communities,
3 and obviously both are impacted by noise and his use of
4 the prior figure for -- for both, you know, to explain
5 his -- his testimony.

6 So I believe he's well within the scope and
7 would just hope we could get through the testimony and,
8 if there's specific objections, to put them in writing
9 later.

10 CO-HEARING OFFICER DODUC: Do you want to add
11 anything?

12 MR. DEERINGER: Hopefully, just to maybe
13 clarify some of the -- the Hearing Officers' thinking
14 as we've been -- Some of what we were just talking
15 about and some of what we were talking about in this
16 hearing.

17 Just for anybody who's kind of puzzled by, you
18 know, what's driving these objections. You know, for a
19 party who's trying to prepare for cross-examination,
20 they look at the direct -- the written direct
21 testimony, they look at the exhibits that are cited
22 there, and they think, does this exhibit support the
23 conclusions in the writing?

24 And so if they pull up a figure and they pair
25 it to the conclusion and they have questions, well,

1 that's what they're going to cover during cross.

2 If they then get to the oral testimony and the
3 figure's pulled out to support a different conclusion,
4 that's unfair surprise testimony. And that's the
5 nature of the objection, as I understand it, that's
6 being raised right now.

7 So even if the figure appears somewhere in the
8 in the written direct testimony, and the conclusion
9 appears somewhere in the written direct testimony, if
10 the two are not paired together in the written direct
11 testimony, and then they are paired in the oral
12 testimony, that can be unfair surprise testimony.

13 So, I just want to make sure that the parties
14 are clear that's -- that's our current thinking as
15 we're considering this objection.

16 MS. ANSLEY: And -- And I would like to ask
17 for -- also for a clarification. I thought that was
18 very clear.

19 But I do think that also the main problem is,
20 is what we have is a party that's put forward very
21 general assertions in their direct testimony and they
22 are waiting till the presentation of their direct to
23 embellish it with technical support.

24 So I also have a -- a problem with that,
25 because when I read the direct testimony, I assume I'm

1 rece -- reading the basis for their statement in the
2 sentence or in the paragraph.

3 And so if I'm going to get a much more
4 detailed technical analysis, I do have a problem with
5 that in addition to what you were clarifying right
6 there.

7 MS. MESERVE: With respect to the surprise,
8 just to make one last point, and adding to what
9 Mr. Deeringer is saying.

10 It's not a surprise to have material that was
11 discussed in cited evidentiary exhibits. Each one of
12 us is responsible for reviewing the testimony and all
13 the exhibits that it relies on in order to be prepared
14 for cross-examination on the day of testimony. And I
15 believe that's all we're asking of the other side, and
16 that's what we've been doing.

17 And that means that -- maybe going through
18 hundreds of pages of reports and looking at figures and
19 being prepared to ask questions about those. And I
20 don't think that we're asking anybody else to do more
21 than we've done.

22 CO-HEARING OFFICER DODUC: Okay. With all
23 that . . .

24 MS. ANSLEY: And I believe my Motion to Strike
25 is still pending.

1 CO-HEARING OFFICER DODUC: We'll take it under
2 consideration.

3 MS. ANSLEY: Thank you.

4 CO-HEARING OFFICER DODUC: At this point,
5 Miss Meserve, Mr. Keeling, I'm wondering, because it's
6 getting late and we're all tired, perhaps we might move
7 to a different witness to present their direct
8 testimony while we sort of take under consideration
9 everything that has been raised with respect to
10 Dr. Shillings', unless -- Are your other witnesses
11 going to be providing the same kind of technical expert
12 testimony as Dr. Shilling?

13 MS. MESERVE: I wouldn't think that -- He's
14 the only designated expert on our panel.

15 I think that he's prepared to proceed with his
16 testimony. I feel badly that he's been interrupted. I
17 would like him to be able to proceed in the order that
18 we had planned to present it.

19 If you would --

20 CO-HEARING OFFICER DODUC: Okay.

21 MS. MESERVE: -- like to put him last or on a
22 different day, I'm not quite sure what you're
23 suggesting.

24 CO-HEARING OFFICER DODUC: I'm just
25 suggesting, if Dr. Shilling is comfortable in

1 proceeding given now the additional scrutiny of his
2 testimony --

3 WITNESS SHILLING: Yeah. I mean, I can do
4 either one.

5 I've tried to in -- indicate to myself, as I
6 said on the break --

7 CO-HEARING OFFICER DODUC: Okay.

8 WITNESS SHILLING: -- how it refers to -- and
9 I've struck this -- taken out a few pages of the .pdf
10 compilation.

11 However, that doesn't mean that I've
12 anticipated all of the possible bumps.

13 And I'd be fine going at the end if that's
14 what you think --

15 CO-HEARING OFFICER DODUC: Nope.

16 WITNESS SHILLING: -- is going to be better.

17 CO-HEARING OFFICER DODUC: I'm leaving it up
18 to you. If you are comfortable proceeding now, we will
19 proceed and --

20 WITNESS SHILLING: Well, I can proceed, and I
21 don't mind if I'm interrupted.

22 And if you want to just treat them as a --
23 Because they may occur on multiple images, multiple
24 .pdf compilation pages. There may be more than one
25 occurrence.

1 CO-HEARING OFFICER DODUC: Right.

2 WITNESS SHILLING: So it's really up to you
3 to -- If you want that, that could easily happen.

4 I'm --

5 CO-HEARING OFFICER DODUC: Not that --

6 WITNESS SHILLING: -- sorry.

7 CO-HEARING OFFICER DODUC: -- I want it,
8 Dr. Shilling.

9 We will proceed with your testimony, since you
10 are prepared to do so.

11 WITNESS SHILLING: Okay.

12 CO-HEARING OFFICER DODUC: We will, of course,
13 take note of any objections Miss Ansley or others might
14 have.

15 WITNESS SHILLING: Okay. I've --

16 CO-HEARING OFFICER DODUC: Just be -- I'm
17 sorry.

18 Miss Ansley?

19 MS. ANSLEY: And -- And -- Yes. I mean, I do
20 apologize. I'm trying to look forward in the exhibits
21 and stuff like that, but I -- I will have objections.
22 There are many exhibits and I will happily point them
23 out and then -- as quickly and quietly as possible for
24 the record.

25 CO-HEARING OFFICER DODUC: All right. We

1 will -- We will venture forth, Dr. Shilling.

2 WITNESS SHILLING: Okay. All right. Thank
3 you for your patience.

4 Can you go to the next page?

5 (Exhibit displayed on screen.)

6 WITNESS SHILLING: All right. This is from
7 LAND-164, and it refers to Page 3, Line 12 of my
8 direct, which is talking about the effect on bird
9 communication in terms of call -- bird calls.

10 And the significance of this is that it can
11 affect bird occupancy and movement through the Delta.
12 At least, that was the point of that.

13 I'm just going to skip through because I want
14 to get to the human community stuff, if I can.

15 So, if you don't mind going to Page 6, .pdf
16 compilation Page 6.

17 (Exhibit displayed on screen.)

18 WITNESS SHILLING: And so I -- I made a
19 statement in an earlier slide that the -- well, the
20 noise modeling was not adequately modeled.

21 And . . . on Page 3, Lines 22 to 24, I
22 reference a paper which includes this table, which
23 talks about noise modeling in general from the point of
24 view of wildlife and -- and, specifically, birds.

25 And in this case, it talks about pile-driver

1 ~~impacts and the -- the modeling that DWR did in~~
2 ~~Chapter 23, which resulted in the noise contour maps,~~
3 ~~which I'm not sure I knew, the -- when I back~~
4 ~~calculated the noise -- the initial noise, it was~~
5 ~~100 decibels.~~

6 MS. ANSLEY: I'm lodging the same objection.
7 This is nowhere in his testimony on birds.

8 WITNESS SHILLING: Okay.

9 MS. ANSLEY: I do see where LAND-148 is
10 referenced on Page 3, Lines 20 to 24, in that area, but
11 I see no calculations. I see no references to an
12 analysis of impacts.

13 WITNESS SHILLING: All right.

14 MS. ANSLEY: I'm trying to be quick -- short.

15 MS. MESERVE: I think he talks about that
16 right on Line 25, so -- I mean, we can have him read
17 his testimony if that would be more helpful, but I
18 think he's trying to provide some expert testimony that
19 illuminates issues that DWR actually didn't even bother
20 to put in their case in chief.

21 So I think it's important for us to be able to
22 hear about this.

23 And you can certainly prepare rebuttal.

24 MS. ANSLEY: I believe he was starting to talk
25 about some calculations that he did, and I don't see

1 anything in his testimony that starts talking about
2 calculations that he did.

3 And -- And perhaps -- I don't have the
4 real-time next to me. I'm trying to, you know, follow
5 quickly and look at everything.

6 WITNESS SHILLING: Okay. So --

7 MS. ANSLEY: So -- So I do move to strike.

8 CO-HEARING OFFICER DODUC: So noted.

9 WITNESS SHILLING: I believe I can adaptively
10 manage my remainder of what I talk about on the fly, so
11 please excuse me for a moment.

12 Could you go to the PowerPoint presentation,
13 135 -- LAND-135.

14 (Exhibit displayed on screen.)

15 WITNESS SHILLING: And the next slide.

16 (Exhibit displayed on screen.)

17 WITNESS SHILLING: I'd like to talk
18 negative -- potential negative impact on human
19 communities and how construction of the Project could
20 result in those -- that type of impact.

21 And I chose the map there to illustrate this,
22 and -- and I had a -- a better slide in the .pdf
23 compilation showing where Clarksburg is. But,
24 hopefully, you all know where Clarksburg is and where
25 Hood is on this map by now.

1 And the point here is that the intake
2 construction is very close to two towns, Clarksburg and
3 Hood.

4 And other parts of the construction further
5 down through the Delta are close to residences. I
6 think those are indicated by the -- the -- the dots
7 that says "structures" in the legend.

8 And the noise modeling here indicates that the
9 50-decibel A and 60-decibel A sound will potentially
10 hit the edge of Clarksburg and go through it.

11 ~~The The statement about whether
12 or not noise propagation was modeled properly does
13 reference the initial -- the importance of the initial
14 sound estimate and the Chapter 23 in the EIR,
15 which I believe is one of my exhibits, does not give an
16 initial noise estimate for pile driving.~~

17 But pile driving is what takes place during
18 the construction of those three red zones, those three
19 intakes, and --

20 CO-HEARING OFFICER DODUC: Hold on.

21 Miss Ansley.

22 MS. ANSLEY: Can you point me to where in the
23 testimony it says there's no initial estimate for pile
24 driving?

25 WITNESS SHILLING: No, I cannot. I was citing

1 things that were present in my testimony and so . . .

2 CO-HEARING OFFICER DODUC: I'm sorry. You
3 were citing things that were present?

4 WITNESS SHILLING: Present, yeah.

5 And so the statement -- My statement that
6 noise propagation was not properly modeled is based on
7 my expert opinion, which as a noise modeler, someone
8 who models noise, my assessment of their modeling of
9 noise impacting both wildlife and human communities was
10 not done properly.

11 ~~And the finding is based on a combination of~~
12 ~~the initial noise volume being too low and then the~~
13 ~~assumptions about noise propagation being too general.~~

14 MS. ANSLEY: And, I'm sorry, I don't believe
15 there's any testimony about the initial noise volume
16 being too low.

17 Would that be the ambient? But I don't see
18 the testimony to that effect, either.

19 WITNESS SHILLING: We can move on.

20 MS. ANSLEY: And I move to strike.

21 CO-HEARING OFFICER DODUC: She has a Motion to
22 Strike that will be noted.

23 MS. ANSLEY: And, again, I'm happy to have him
24 read conclusions from his testimony. I'm not trying to
25 be obstructionist.

1 WITNESS SHILLING: So --

2 CO-HEARING OFFICER DODUC: Dr. --

3 Dr. Shilling --

4 WITNESS SHILLING: I'm sorry.

5 CO-HEARING OFFICER DODUC: -- I --

6 WITNESS SHILLING: Was I jumping the gun?

7 CO-HEARING OFFICER DODUC: No, no. I --

8 I . . .

9 The purpose of the direct testimony in this
10 hearing is to summarize what is in the written
11 testimony, and so . . .

12 And I believe this happened in Part 1 to one
13 of Petitioners' witnesses that went beyond what was in
14 the written testimony.

15 To the extent that you offer opinions that go
16 beyond your written testimony, that's when we get into
17 this issue of surprise testimony.

18 WITNESS SHILLING: Right.

19 CO-HEARING OFFICER DODUC: So if you could
20 just focus on the con -- the -- what's in your written
21 testimony, summarize and presenting what the key
22 highlights are from that testimony, we should be okay.

23 WITNESS SHILLING: Okay. I can do that.

24 CO-HEARING OFFICER DODUC: In addition -- Hold
25 on.

1 MR. DEERINGER: Just quickly.

2 Miss Ansley, is someone on your team keeping
3 track of the pending Motions to Strike so that, at the
4 end, we can compare notes?

5 MS. ANSLEY: I think --

6 MR. DEERINGER: Or we'll -- Or we can just
7 read the transcript.

8 MS. ANSLEY: We're really short staffed. I
9 haven't looked -- I think we're going to have to look
10 at the real-time transcript for the --

11 MR. DEERINGER: Okay.

12 MS. ANSLEY: -- Motion to Strike.

13 But, as far as I can tell, I just made a
14 Motion to Strike on pile driving and initial --
15 testimony regarding pile driving and testimony
16 regarding initial noise --

17 Shoot. I'm sorry.

18 -- initial noise levels as opposed to noise
19 from, I guess, construction effects. But initial noise
20 levels. I'm sorry. I forget the exact term of art.

21 MR. DEERINGER: Okay. I just want -- I just
22 wanted to make sure that we had a way to kind of go
23 back and make sure we're on the same page about the
24 scope of pending Motions to Strike.

25 MS. ANSLEY: We'll have to do the best we can

1 with the rough transcript, which we do receive.

2 MR. DEERINGER: Sure.

3 MS. ANSLEY: We'll start trying to keep track
4 right now, obviously.

5 WITNESS SHILLING: Okay. So further impacts
6 on human communities.

7 The approach that the Applicant uses for
8 understanding noise effects on people is called Leq,
9 which is an averaging approach to loudness --
10 understanding loudness and potential effects. That's
11 on Page 5, Line 3, of my testimony.

12 And this approach masks high levels of sound.
13 Because if you can picture your heart beating, so
14 there's a spike and then there's a low point and a
15 spike and a low point.

16 If you were to average that out, the amplitude
17 of that, you'd end up with something lower than the
18 spikes. But the spike is what's important when -- when
19 we're talking about disturbing people.

20 So the Leq approach, by averaging out noise
21 levels every time, masks those short-term --
22 short-duration spikes in sound.

23 And, actually, the -- the fact that you have
24 these short-term peaks above 60 decibels indicates that
25 you have these spikes that go well above 60 because, in

1 the interval, you have quiet. Otherwise, there
2 wouldn't be such a high average sound condition.

3 In terms of health effects which are discussed
4 in that section, there are a variety of health effects
5 which I talk about. Hypertension is one of those. And
6 hypertension treatment is one of the most common forms
7 of treatments for cardiac disease. And noise has a
8 direct driving effect on hype -- occurrence of
9 hypertension, and construction noise and so on.

10 Despite those -- those kinds of effects that
11 are in the literature, those are not referenced,
12 they're not used, to develop mitigation for this
13 Project.

14 Meaning that anybody who's within the affected
15 area in the map there, Clarksburg and Hood, could
16 have -- could suffer from increased incidence of
17 hypertension.

18 Actually, there's a . . .

19 Sorry. I wasn't expecting to refer directly
20 to my direct.

21 So that -- The fact that those negative health
22 outcomes could occur -- and I would say, in my expert
23 opinion, would predictably occur as a result of this
24 Project -- essentially a tradeoff is being made between
25 the benefits to California of having the twin tunnels,

1 in terms of water supply, and the negative impacts that
2 will occur to the people who live there, some of whom
3 are sitting to my right.

4 And that -- that tradeoff really isn't talked
5 about at all and it -- and it's really at the basis of
6 this Project.

7 Okay. So next slide, please.

8 (Exhibit displayed on screen.)

9 WITNESS SHILLING: I'm going to just stick to
10 the PowerPoint and not refer to my .pdf compilation. I
11 think that'll keep things simpler.

12 So, at this point, I want to talk about --

13 MS. MESERVE: I just -- Dr. Shilling, if you
14 do need to refer to the compilation, then we might as
15 well try and we can go through that. I don't want you
16 to be deferred from providing the testimony that you
17 intended to provide today, as long as it's within the
18 scope as we've been discussing.

19 WITNESS SHILLING: Okay.

20 CO-HEARING OFFICER DODUC: As long as it's
21 within the scope of your written direct testimony.

22 WITNESS SHILLING: Well, in my opinion, it is,
23 which is why it's in the .pdf compilation, because I
24 cite studies and then pull a figure out.

25 So, as far as I'm concerned --

1 CO-HEARING OFFICER DODUC: Well, yeah, but
2 then you expand upon it, which is what Miss Ansley --

3 MS. ANSLEY: Right.

4 CO-HEARING OFFICER DODUC: -- is --

5 WITNESS SHILLING: Yes.

6 CO-HEARING OFFICER DODUC: -- objecting to.

7 WITNESS SHILLING: Okay. So let's go to

8 .pdf -- since we've now skipped over a bunch of

9 pages -- .pdf compilation Page 15.

10 (Exhibit displayed on screen.)

11 WITNESS SHILLING: And -- Don't look at this

12 yet.

13 So -- So, the idea of sustainability is -- is

14 really something that we have out there as an idea.

15 This is all talked about on -- starting on Page 6. And

16 it's been around for awhile.

17 The Brundtland Commission definition is given

18 on Page 6, Lines 7 to 11. And it talks about thinking

19 about -- Sorry. That's not the definition.

20 That's . . .

21 CO-HEARING OFFICER DODUC: Institutional

22 failure.

23 WITNESS SHILLING: Yeah. I thought I --

24 I'm --

25 MS. MESERVE: Excuse me.

1 WITNESS SHILLING: -- sorry. I was -- The --

2 MS. MESERVE: Madam --

3 WITNESS SHILLING: -- sustainability

4 definition is on the next page.

5 MS. MESERVE: -- Hearing Officer --

6 CO-HEARING OFFICER DODUC: Is that where you

7 are?

8 MS. MESERVE: Is -- Is it necessary for

9 counsel to be standing at the podium right now?

10 I don't understand what's going on here. I

11 would like my witnesses to be able to present their

12 testimony without being hovered over.

13 CO-HEARING OFFICER DODUC: I think she is

14 preparing to object.

15 MS. ANSLEY: I actually have -- I do not have

16 objections to this particular slide, which I believe is

17 the Brundtland Report.

18 I was only standing here because we are

19 flipping between slides. I'm happy to back up and sit

20 down but I -- I don't think I'm hovering over a

21 witness.

22 CO-HEARING OFFICER DODUC: Why don't you take

23 a seat.

24 WITNESS SHILLING: So if we could skip briefly

25 back to the PowerPoint, and I'll just introduce this --

1 this idea a little more generally.

2 So we talk about sustainability in pretty much
3 every -- nowadays every State institution. It's in
4 statute; it's in our policies and plans. Projects are
5 funded because they claim to contribute to
6 sustainability.

7 And so it's worth evaluating a Project of this
8 scale as to whether or not it meets sustainability
9 principles.

10 Those are usually somewhat vague. In this
11 case, they're not discussed at all. And so there's not
12 a discussion of the relative contribution of the Twin
13 Tunnel Projects to State or regional scale
14 sustainability.

15 So if we now go to the next -- to the .pdf
16 compilation.

17 (Exhibit displayed on screen.)

18 WITNESS SHILLING: In this case, I'm -- I'll
19 briefly summarize this sentence and -- and, hopefully,
20 I do it correctly.

21 Basically, the Brundtland Commission
22 recognized 30 years ago that it's challenging for us
23 institutionally to . . . to think about sustainability
24 because we have a separation of permitting of
25 environmental actions and agencies carrying out

1 environmental destructive actions.

2 And that that means that when, we develop
3 policy or we consider Permits, we have to consider
4 those ecological or other dimensions as part of that
5 process in order to be effective in meeting the
6 sustainability requirements that the Brundtland
7 Commission first laid out.

8 Next page, please.

9 (Exhibit displayed on screen.)

10 WITNESS SHILLING: And this is from the
11 California Water Plan, which is a Department of Water
12 Resources-led process, but it is multistate agency, and
13 it includes a definition of what a sustainable system
14 is, which is on Page 7, Line 9 to 11.

15 And, basically, it -- it lays out that we
16 think about different aspects of a system, different
17 aspects of a Project, if we're going to call it
18 sustainable, and how it meets multiple needs: Economy,
19 ecosystem, equity. And so it's not just about water
20 supply.

21 And so if we're doing these things
22 sustainably, we are not just considering one facet of
23 it, especially for a Project this scale.

24 Next slide, please. Next page.

25 (Exhibit displayed on screen.)

1 WITNESS SHILLING: And this is laid out in the
2 California Water Plan 2013 Update in the form of a
3 diagram essentially, saying that we should consider a
4 lot of different means, a lot of different information
5 when we're making decisions.

6 In this case, it's how we make decisions based
7 on sustainability indicators, things we can measure
8 related directly to sustainability.

9 And what it -- what it basically tells us is
10 that, when we consider everybody's needs, which are
11 tribes and communities, agencies and so on, then what
12 we should get out of a process like that is
13 contributing to the goals that everybody has. And then
14 when we circle back around, then we can accomplish
15 adaptive management.

16 Next page, please.

17 (Exhibit displayed on screen.)

18 WITNESS SHILLING: Actually, let's skip this
19 one. Go on.

20 (Exhibit displayed on screen.)

21 WITNESS SHILLING: Hold on just a second.

22 I'm having to refer to three different things
23 now because I wasn't anticipating . . .

24 Could you go to the -- to the PowerPoint?

25 (Exhibit displayed on screen.)

1 WITNESS SHILLING: So the last thing I'm going
2 to talk about is compatibility with regional planning.

3 Could you go to the next slide.

4 (Exhibit displayed on screen.)

5 WITNESS SHILLING: And regional water
6 management is something we're really familiar with.
7 Again, at the same kind of level as sustainability.
8 It's something we talk about a lot. It's included in
9 many funding mechanisms, statutes, policies and so on.

10 But how we implement it is what's really
11 important. That's what establishes us as a -- you
12 know, actually gov -- employing governance when it
13 comes to the environment.

14 The Delta is a region. It's been a region
15 since the Bay-Delta Accord, CALFED and so on. It's
16 treated as a region. But in a lot of ways, it's also
17 treated as a sacrifice zone. It's a zone of
18 distraction.

19 And so there's a -- there's a little bit of a
20 potential issue there, and I think that this Project
21 really highlights that.

22 And so if we look at the Delta Region as a
23 place, as a region, then Twin -- the Twin Tunnels
24 Project will impact how well that region can carry out
25 water planning, how it can meet Sustainable Groundwater

1 Management Act requirements, water quality
2 requirements, and any other kinds of requirements that
3 are -- that are present.

4 We can go back to the .pdf compilation,
5 please.

6 (Exhibit displayed on screen.)

7 WITNESS SHILLING: I'm going to try to catch
8 up here.

9 Could you go down to the bottom of the page
10 without going to the next page.

11 (Exhibit displayed on screen.)

12 WITNESS SHILLING: So, this is -- this is just
13 highlighting that in -- and this is cited on Page 7,
14 Line 12 of my direct -- that we take regional planning
15 very seriously. And if we just use a monetary index
16 for that, we spend billions and billions of dollars on
17 this concept.

18 Next slide, please. Next page.

19 (Exhibit displayed on screen.)

20 WITNESS SHILLING: And this is showing a map
21 that's the regions that are defined . . . Let's see.
22 Page 10 of my direct, starting Line 22.

23 The Delta cuts across several different
24 regions. When we think about integrated regional water
25 management, that's the primary type of water management

1 region that's defined in this area. It's -- The Delta
2 overlaps four of those and, therefore, what happens in
3 the Delta impacts these regions' ability to meet their
4 planning needs.

5 Next slide. Next page, please.

6 CO-HEARING OFFICER DODUC: Hold on.

7 WITNESS SHILLING: Yes.

8 CO-HEARING OFFICER DODUC: Miss Ansley.

9 MS. ANSLEY: I'm sorry. Is -- Is there a typo
10 in the direct? This is LAND -- That map was LAND-153.
11 And I'm -- I'm fine with this map. I just think the
12 testimony at Line -- Page 10, Line 24, 25, says
13 LAND-154. And I just want to make sure that I'm
14 cognizant of the right map.

15 WITNESS SHILLING: That could be my typo
16 because what it says in the direct is Map of Planning
17 Regions, which is what this is.

18 So --

19 MS. MESERVE: If I could --

20 MS. ANSLEY: Yeah.

21 MS. MESERVE: I can probably clarify, I think.
22 153 is the overall report and then 154 is just
23 this map.

24 WITNESS SHILLING: Oh, okay.

25 MS. ANSLEY: Even though this map says

1 LAND-153?

2 WITNESS SHILLING: Well, it's from 153 but
3 apparently it was -- it should have said LAND-154 at
4 the little tag at the bottom.

5 MS. ANSLEY: Oh, I -- I think I understand.

6 MS. MESERVE: It's within --

7 MS. ANSLEY: You extracted and made LAND-154.

8 I'm fine. Thank you.

9 MS. MESERVE: Yes, for convenience.

10 WITNESS SHILLING: Flow.

11 All right. Next .pdf page, please.

12 (Exhibit displayed on screen.)

13 WITNESS SHILLING: Thank you.

14 And let's go to the next one.

15 (Exhibit displayed on screen.)

16 WITNESS SHILLING: This is looking at how
17 Department of Water Resources refers to integrated
18 regional water management.

19 And right at the top of the page, there's a
20 discussion of what IRWM is. And it -- And it talks
21 about it being a collaborative effort.

22 So it's really establishing this as a -- an
23 idea that IRWM, regional water management, is key to
24 water planning in California. And then when we do it,
25 we involve all of the parties, all of the stakeholders,

1 in making joint decisions about what man -- water
2 management consists of. We do it to reduce conflict,
3 to meet water quality and water supply requirements, to
4 meet equity and other requirements that are listed
5 there.

6 So it really is establishing this as a -- the
7 basis for how we do or should do water planning.

8 Next page, please.

9 (Exhibit displayed on screen.)

10 WITNESS SHILLING: This is the -- the -- It
11 says LAND-153 but I think it was with -- it was taken
12 from LAND-153.

13 And it's showing the priority, high and median
14 priority groundwater basins under Sustainable
15 Groundwater Management Act. And the Delta Region --
16 which isn't outlined here but I think we all know where
17 it is -- does include medium and high-priority
18 groundwater basins.

19 And so when we think about the ability of
20 entities in -- And this is referred to on multiple
21 pages starting on Page 11 in my direct.

22 When we think about the ability of entities to
23 regionally plan for conjunctive use for surface water
24 and groundwater use, they are already sitting on top of
25 basins that have been highlighted as -- as priority

1 and -- or could potentially face restrictions.

2 So any further water withdrawal would
3 potentially affect their ability to jointly manage
4 these supplies amongst themselves and conjunctively
5 manage between surface and groundwater.

6 Next page, please.

7 (Exhibit displayed on screen.)

8 WITNESS SHILLING: I think . . . I think I'll
9 just skip to summarizing at this point.

10 So, in my opinion -- And this part does not
11 have any citations to LAND documents because it's a
12 summary.

13 The Twin Tunnels Project will create a
14 sacrifice zone for wildlife and communities. The noise
15 of construction of the intakes and other infrastructure
16 will disrupt normal home, school, workplace and faith
17 practice, in other words, community -- human community
18 practices, in Clarksburg and Hood and other residential
19 areas.

20 Now, when I wrote that sentence, I wrote it as
21 an academic sentence. And I think it's really
22 important to understand that there are people behind
23 that statement. And so, to me, I live in Winters,
24 it's -- it's not critical.

25 But it is a critical human thing, and I -- I

1 don't want to lose that when I read that dry sentence.

2 The noise and additional traffic will create a
3 barrier for wildlife and birding across the Delta
4 Region.

5 Extraction of water upstream of the Delta will
6 affect the ability of regional agricultural water
7 interests to meet water quality and sustainable
8 groundwater management requirements.

9 For these reasons, and thousands of reasons
10 you will hear from many others, this Project is not
11 sustainable. Despite the rich and constant expression
12 of how sustainable California's practices are, this
13 Project would not pass even basic tests for
14 sustainability, which I helped develop, and there's a
15 blot on our reputation as a progressive state.

16 Thank you.

17 CO-HEARING OFFICER DODUC: Thank you,
18 Dr. Shilling. Indeed, thank you very much.

19 MS. MESERVE: Okay. Let me find my notes on
20 this next.

21 We will now go to Mr. Robinson. And I lost my
22 notes about his exhibit numbers. Hold on.

23 Here we go.

24 Good afternoon, Mr. Robinson.

25 Is LAND-188 a true and correct copy of your

1 testimony?

2 WITNESS ROBINSON: Yes, it is.

3 MS. MESERVE: And are -- Is LAND-190 photos
4 you took in preparing your testimony?

5 WITNESS ROBINSON: Yes.

6 MS. MESERVE: And then did you also rely on
7 the map -- the traffic or roadway map in LAND-123?

8 WITNESS ROBINSON: Yes.

9 MS. MESERVE: Please go ahead and summarize
10 your testimony.

11 WITNESS ROBINSON: I'm Dave Robinson, a
12 volunteer firefighter with the Walnut Grove Fire
13 Department. It's a completely volunteer department.

14 I have volunteered in Walnut Grove since 1997.
15 I've been Assistant Chief since 2001. I also spent 23
16 years with the Stockton, California, Fire Department.

17 As an emergency responder in the Delta, I am
18 familiar with the particular needs of the region as
19 they relate to emergency services, transportation
20 access, and the community in general.

21 I'm a fifth-generation resident. I currently
22 live on the land my ancestors reclaimed in 1872.

23 The purpose of this testimony is to provide
24 information on ways Delta tunnels will affect Delta
25 communities like Walnut Grove. Specifically, I will

1 discuss how the construction of the Project will impede
2 abilities and responsibilities for emergency
3 responders.

4 The Delta's intricate geography makes the area
5 susceptible to traffic issues. More importantly,
6 traffic issues compound severity of emergency
7 situations by lengthening response time for
8 firefighters, EMT, and other necessary services.
9 Currently, ambulance serve -- ambulances serving Walnut
10 Grove and Courtland area respond to Elk Grove.

11 With years of planning construction, years of
12 increased traffic and years of Project-related
13 accidents, Delta communities will surely suffer harm.

14 Emergency response times will increase, access
15 to roadside accidents will become more difficult, and
16 emergency responders will be spread thin. Put plainly,
17 the Delta tunnels are bad for the health and safety of
18 Delta communities.

19 The Walnut Grove Fire Department is an
20 all-volunteer Department with about 25 members. Of
21 that, we have about 15 that respond on a regular basis.
22 This response depends on the day of the week and time
23 of the day.

24 Frequently, during the work day, we have a
25 very skeleton crew and we only have a few members able

1 to respond due to their regular jobs. Many don't live
2 or work in town but in the area around Walnut Grove,
3 requiring them to put down what they're doing, drive to
4 the fire station and respond with fire apparatus.
5 There are also times on weekends we have only a few
6 people available to respond.

7 Could you put up LAND-190, please.

8 (Exhibit displayed on screen.)

9 WITNESS ROBINSON: If you're not familiar with
10 the Delta roads, they're two-lane roads built on top of
11 a levee. They usually have no or very little shoulder.
12 A few feet off the road in either direction will cause
13 a 20-foot drop into the water or in the dirt.

14 If an accident occurs, it is unlikely those
15 involved will be able to clear the road given the lack
16 of shoulders to pull onto. Vehicles -- The vehicles
17 behind will not be able to pull around because of
18 narrow width of the roads and oncoming traffic.

19 If the incident blocks both lanes, oncoming
20 traffic will be stuck as well. This creates a gridlock
21 scenario with little room and considerable delays for
22 emergency responders. The gridlock also delays or can
23 prevent volunteers from responding to the station to
24 man the apparatus.

25 Accidents also affect the surrounding areas

1 more severely in the Delta. With limited alternate
2 routes available to reach any given destination,
3 drivers can only be rerouted along a few other roads.
4 Frequently, this means turning around, going back the
5 same road you just came down on to get rerouted.

6 Drivers may also be rerouted in a way that
7 further inhibits emergency responders' ability to
8 access the incident.

9 LAND-1 -- LAND-123, please.

10 (Exhibit displayed on screen.)

11 WITNESS ROBINSON: Now, currently, when there
12 are problems in other areas, traffic increases
13 tremendously through Walnut Grove. For example, when
14 there are problems on Highway 12, which is down below
15 by Rio Vista, traffic can be rerouted through Walnut
16 Grove over to I-5 and back to Highway 12.

17 This is a 30-plus-mile detour leading to very
18 impatient drivers. And when that happens, Highway 160
19 will be backed up 2 or 3 miles from Walnut Grove.
20 Isleton Road is backed up and traffic in town is backed
21 up all the way through town, and this is just with the
22 current traffic volumes.

23 When this happens, it can be almost
24 responsible to respond to the station when a call comes
25 in and extremely difficult to even get a fire engine or

1 truck on the levee roads to respond.

2 Additionally, this is an agricultural area and
3 has been so since it settled. Farmers have to move
4 equipment from one field to another. This equipment is
5 frequently wide and slow. Combine that with impatience
6 of modern drivers today, it creates a dangerous
7 scenario. The Delta tunnels will only make these
8 issues worse and is bad for the public interest.

9 The Proposed Project requires considerable
10 truck usage hauling heavy materials and waste back and
11 forth. With large increases of traffic on the roads in
12 places like Walnut Grove, it would be more difficult
13 for me to access incidents.

14 Now, some main areas of concern for Walnut
15 Grove Fire Department during the State Route 160 and
16 the River Road:

17 From Highway 12 below Isleton all the way up
18 the river, this is currently the main route for
19 commuters and people traveling from the Bay Area to
20 Sacramento. It's a 55-mile-an-hour road, and although
21 it's double yellow-lined, if you do the speed limit,
22 you're going to be passed.

23 I think the Paintersville Bridge is
24 Highway 190. And this is the Paintersville Bridge --
25 Or this is the Steamboat Slough Bridge, Paintersville

1 Bridge. You can see they're basically one-lane
2 bridges. They don't have good visibility access.

3 Frequently -- They are posted for trucks one
4 lane but frequently cars don't see them pull on there.
5 Everybody has to stop while the cars back off the roads
6 and the truck can get through and start the traffic
7 again.

8 The Walnut Grove Bridge crosses the river in
9 Walnut Grove. It takes vehicles from Highway 160 to
10 River Road on up to Twin Cities Road.

11 Twin Cities is a very busy road with some very
12 difficult visibility areas, a very narrow bridge, and
13 is one of the few roads accessing I-5 from the Delta.

14 LAND-188, please.

15 (Exhibit displayed on screen.)

16 WITNESS ROBINSON: That's the wrong one.
17 Maybe I have something wrong here.

18 Anyway, the Isleton Roads between Walnut Grove
19 and Isleton bridge is a very narrow, curvy county road
20 with no shoulders that already -- already carries a lot
21 of traffic.

22 It's not well marked --

23 MS. MESERVE: Excuse me, Mr. Robinson.

24 WITNESS ROBINSON: Yes.

25 MS. MESERVE: Did you want to look at the

1 tables on Pages 4 and 5 of this testimony?

2 WITNESS ROBINSON: Yes.

3 (Exhibit displayed on screen.)

4 WITNESS ROBINSON: This is with the current
5 hourly rates and the projected rates which will
6 increase tremendously.

7 Anyway, Isleton Road is also a very narrow
8 road with a lot of traffic, and also it has Andrus
9 Island Road that Ts into it. It makes it very
10 difficult and dangerous for trucks and school buses to
11 get on to Isleton Road.

12 River Road between Isleton Road and Twin
13 Cities Road is a narrow county road with a lot of
14 traffic that goes through Walnut Grove and Locke. This
15 is a main road where traffic accesses Twin Cities and
16 out to I-5.

17 The Project would also thin out already
18 shorthanded emergency response resources. Once again,
19 Walnut Grove is an all-volunteer Department. There's
20 nobody at the station until the alarm goes off. The
21 volunteers have to drive to the station to man the
22 apparatus. Walnut Grove is only one of many
23 volunteer-based Fire Departments. Clarksburg,
24 Courtland and Isleton all have volunteer departments
25 while River Delta and Rio Vista rely on volunteers to

1 supplement a small full-time staff.

2 Each Department relies on mutual aid from
3 their neighbors, so service area is not strictly
4 defined by the Department map.

5 The Project construction would take 13 or more
6 years to complete. That is 13 years of truck traffic
7 carrying potentially hazardous materials on difficult
8 roads and years of more construction-related accidents.

9 Departments like Walnut Grove could see
10 increases and emergencies requiring response without an
11 increase in available resources. This'll take away
12 from our ability to serve our Delta communities and
13 negatively impact the public.

14 I'm also concerned that the mitigation
15 measures and the FEIR are inadequate and unspecific.
16 To address traffic impacts, the Project offers
17 mitigation measures intended to limit traffic
18 congestion.

19 The Proponents say they want to coordinate
20 with local emergency response agencies to develop
21 traffic management plans.

22 Some of the measures do not effectively
23 address the effects on Delta communities, such as using
24 detours and bridges as alternate access routes.

25 The nature of roadways in the Delta limit

1 detour options and the bridges of the Delta would
2 already be suffering from increased traffic volume.

3 Other measures are not specific enough to
4 indicate their effectiveness, such as the procedures
5 for roadside emergencies.

6 Could you please put up SWRCB-102, FEIR/S
7 Chapter 19, Page 19-222.

8 MS. MESERVE: Excuse me. It will probably be
9 easier to go to the Robinson .pdf compilation. I
10 believe it will be the last page in there will be the
11 EIR excerpt which is the page he wishes to discuss.

12 (Exhibit displayed on screen.)

13 WITNESS ROBINSON: Basically, at one end, they
14 have incident -- One of the directions that directs
15 haulers are to pull over in the event of emergency.
16 Emergency vehicles approaching in a narrow two-way
17 roadway specify measures to ensure that appropriate
18 maneuvers will be conducted by the construction
19 vehicles to allow continual access for the emergency
20 vehicles at the time of the emergencies.

21 That's pretty much what the law says.

22 As for the delay -- As for the safety issues
23 caused by the Project construction, mitigation measures
24 are focused largely on containing on-site hazards.
25 While these measures are absolutely necessary, I think

1 there are ways for the proponents to more directly
2 assist emergency responders in the Delta.

3 First, the FEIR/S already anticipates
4 providing 24-hour on-site security in construction
5 zones in an effort to alleviate demand on law
6 enforcement.

7 The Project should also hire its own emergency
8 responders, such as trained firefighters and emergency
9 medical technicians, as local agency don't have the
10 capacity to respond to industrial accidents of the
11 magnitude of a Project like this. Requiring the
12 Project to provide its own emergency responders would
13 preserve our limited resources for the Delta.

14 I'm concerned not only with the traffic but
15 the safety of the workers at the site. I have read the
16 safety precautions that will be taken at the site to
17 minimize dangers and accidents but there's no plan on
18 what to do if there is a HazMat or industrial accident.

19 I'm aware of Courtland Fire Department's
20 capabilities and ours and I'm concerned for the safety
21 of the workers. You have two understaffed departments
22 with minimal training responding to a fire station and
23 to the incident, not a timely response in times with
24 inadequate resources.

25 This would not only be a serious problem for

1 the health and safety of the individuals involved in
2 the incident but would take the few volunteers
3 available at that time out of town, leaving their
4 respective communities unprotected.

5 If the Project must rely on local emergency
6 responders, proponents should provide the funding for
7 local emergency responders to expand their
8 capabilities.

9 Walnut Grove currently has good front-line
10 firefighting apparatus but if that equipment goes out
11 for mechanical reasons or service, we are severely
12 downgraded.

13 Also, the equipment we carry, such as
14 turnouts, SCBAs, extrication equipment, is barely up to
15 standard. This is very expensive equipment and hard
16 for a volunteer department with a budget like ours to
17 replace.

18 If the proponents are expecting agencies like
19 Walnut Grove Fire Department to effectively respond to
20 emergencies, the proponents ought to invest in these
21 agencies. Only with more resources could we be better
22 equipped to deal with the slew of Project-related
23 issues and better protect public safety.

24 In conclusion, as a resident and volunteer
25 firefighter in the Delta, I do not believe the Project

1 is in the public interest. The human cost that
2 construction will bring are not worth the supposed
3 benefits. There are serious issues of public safety
4 that are not being properly acknowledged. As is, the
5 plan does not do enough to alleviate my concerns that
6 the traffic and construction will strain emergency
7 responders' resources and interfere with our ability to
8 serve the Delta.

9 MS. MESERVE: Thank you, Mr. Robinson.

10 Now we'll hear from Daniel Wilson.

11 Mr. Wilson, is LAND-132-Revised a true and
12 correct copy of your testimony?

13 WITNESS WILSON: Yes.

14 MS. MESERVE: Go ahead and summarize your
15 testimony, please.

16 WITNESS WILSON: Well, I'm not going to read
17 my testimony. I will summarize it. I hope I don't go
18 too far off script.

19 My professional background is a farmer. I
20 graduated out of Davis as a Mechanical Engineer. I've
21 been involved in farming for 50 years. I've been
22 involved in levees and flood fights for almost as long.

23 I'm here to kind of discuss what this does to
24 the farming community in the Delta.

25 To function as a farming community, there

1 needs to be adequate support services. You need to
2 have the local machinist, you need to have the local
3 parts store, the John Deere dealership, the Peterbilt
4 repair shop. All these things go into making the Delta
5 a -- a place where a farm can make money and profit.

6 And on the other side of the coin, the Delta
7 is full of processing facilities that make wine, large
8 and small. We have microwineries and we have, I think,
9 the eighth biggest winery in the country. Packing
10 facilities that pack fruit, four or five of those,
11 which she'll get into a little bit more.

12 As these entities are reduced by loss of
13 farmland and inability to haul product -- Winding river
14 roads are difficult to haul product down the Delta as
15 it is. As it becomes increasingly more difficult, we
16 begin to lose customers, we begin to lose services, and
17 that critical mass that has made the Delta a place to
18 farm effectively is lost.

19 And when you look at this Project, when you
20 look at what they call TRANS-1 in the construction
21 process -- And I think the previous witnesses have hit
22 this comment pretty hard. I don't have to hit it
23 begin, but there's going to be considerable traffic.

24 And during the fruit seasons, when we haul
25 cherries or pears or items like that, they're very

1 susceptible to sun damage and -- and road damage. And
2 delaying a truck full of cherries, as an example, 10
3 minutes to allow three dump trucks to go by can destroy
4 the product. We don't see that addressed at all in --
5 in this situation.

6 The harvest conflict would be just insane as
7 near as I can tell looking at that area. And when I
8 speak to it, I speak from personal experience, because
9 our -- one of our orchards is right in the middle of
10 Intake Number 2. When you look at that sketch, that
11 orchard you see underneath it, that's us. So that's
12 what's got our interest in this -- in this Project.

13 It's pretty clear that our pavement is in poor
14 condition and will be destroyed by this Project. And
15 the response to that would be, well, you know, the DWR
16 has agreed that they might possibly come in and fix
17 some of this in conjunction with the underfunded county
18 repairs and the underfunded State repairs.

19 My experience with the DWR on this Project,
20 and specifically on that property, when the DWR wanted
21 to come in and take soil samples and dig wells and such
22 on our property created a . . . attitude of distrust
23 and attacked us essentially and said, "You will do it
24 this way," and to the point where we had subpoenas
25 served on my 80-year-old mother at 9 o'clock at night

1 in the rain. I mean, just the attitude of, "We know
2 exactly what we're doing. Get the Hell out of our way.
3 We want an approach on this."

4 On the other side of that whole process, we
5 have no target. We have no plans to look at. We have
6 no blueprints to look at.

7 When I brought up the sketch of the Entrance
8 Number 2 in Part 1, I was objected to because that's
9 not an official drawing.

10 There are no official drawings apparently.
11 There is nothing to actually look at. There's
12 sketches. There's proposals. There's preferred
13 alternatives. But there's absolutely no definable
14 target.

15 You're asking us to come in here today and
16 describe the damage that this is doing to us. We can
17 only speak in general terms. We can't speak in heavy,
18 heavy specifics.

19 I -- I -- I have listed a couple of the other
20 things that talk about emergency services but I think
21 that was covered very well by my colleague.

22 And then you look down the road. The idea
23 that this construction project is going to happen on
24 time and in schedule is just -- In my mind -- there's
25 no expert opinion here, this is just a farmer

1 talking -- there's no way they're going to build this
2 on the Construction Schedule that they have. In fact,
3 in light of some of the chitchat lately, it's even
4 going to be longer.

5 I'm 63 years old. I suppose after 30 years
6 I -- I won't worry about it that much, but we're a
7 legacy community. We have farmers. I'm
8 fifth-generation farmer. My -- My nephews and my son's
9 involved in the farming. My grandchildren, I'd like to
10 see them involved in the farming.

11 This thing is going to drag on for a long,
12 long time, and it's being handled by a kind of heavy
13 handed "we know better" process.

14 And I know the third leg of the stool is to
15 preserve the Delta as a growing, evolving community
16 place. We haven't been asked what our thoughts are on
17 this. I mean, some of us are testifying here, things
18 like that.

19 But this whole process has been, "The only
20 solution is these twin tunnels and there's no other
21 possible solutions," even though many other solutions
22 have been discussed over the years.

23 In summary, I don't think these outlets being
24 moved from Tracy up here, I don't think this proceeds
25 to the benefit of the Delta in specific.

1 And it's a parochial attitude I have. I -- I
2 live there.

3 I don't think it's a sustainable solution.
4 And I think there's many other simpler solutions that
5 could resolve export issues that just have been
6 ignored, haven't been looked at. We have plans going
7 back to the '90s that would solve some of these issues
8 without such drastic construction-making situations.
9 It could be done quicker, faster, shorter.

10 And they've just been ignored and hadn't
11 looked at and pushed straight ahead with this process.

12 I guess, in summary, I think it's a bad idea.

13 Thank you.

14 MS. MESERVE: Thank you, Mr. Wilson.

15 And then, finally, we will hear from
16 Miss Sarah Hemly.

17 And Miss Hemly, is LAND-198 a true and correct
18 copy of your testimony?

19 WINESS HEMLY: Yes, it is.

20 MS. MESERVE: And is LAND-199 a true and
21 correct copy of your PowerPoint?

22 WINESS HEMLY: Yes, it is.

23 MS. MESERVE: And if you could go ahead, I
24 think we will be looking at LAND-199 for your
25 testimony.

1 If you'd like to go ahead and summarize it.

2 (Exhibit displayed on screen.)

3 CO-HEARING OFFICER DODUC: Good. Because
4 LAND-199 is beautiful.

5 WINESS HEMLY: Thank you.

6 Well, welcome to the Delta.

7 So, I am here to speak a little bit on part of
8 some of the new and exciting things we've got going in
9 the Delta.

10 So we -- we are growing food and business.

11 Well, first, let me say who I am. I am Sarah
12 Hemly. I am married to a sixth-generation farmer. I
13 am President, cider maker and owner of Hemly Cider. I
14 am also a mother to two -- a six-year-old and an
15 eight-year-old boy who attend school in Clarksburg.

16 So I'm going to talk a little bit about some
17 of the amazing businesses that we have. We have an
18 overview here of three companies, our Hemly Cider,
19 Branch Box and Muddy Boot.

20 But, first, let's talk a little bit about the
21 Delta.

22 So next slide.

23 (Exhibit displayed on screen.)

24 WINESS HEMLY: I think the Delta is a unique
25 jewel for not only California but for the world.

1 There's no other place that's like it.

2 It is a unique place for Delta agriculture.

3 It's a place for unique businesses that are forming.

4 It's -- This is an irreplaceable value to California,
5 to the world.

6 Let's go -- We've been here -- This is a
7 generation -- Like we've talked about before, this is
8 generations going back. This isn't something that we
9 can ever replace.

10 Next slide.

11 (Exhibit displayed on screen.)

12 WINESS HEMLY: This -- So this is talking --
13 This picture is before the levees went up, so this is
14 the generations that were here before levees. They --
15 This is -- This is a California story, essentially,
16 where we're -- We've taken pieces from all over the
17 world and brought them into this amazing region and
18 built something spectacular, and we're continuing to do
19 that on a daily basis.

20 So this is -- The history of the Delta is not
21 only just this one microcosm. It is your history.
22 This is your story. This is -- This is California.

23 Next slide.

24 (Exhibit displayed on screen.)

25 WINESS HEMLY: So, this is beautiful Delta,

1 where you can grow things like nowhere else in the
2 world.

3 So we have Muddy Boot, which we'll talk about
4 coming with chenin blanc that is winning awards that
5 you can't grow somewhere else.

6 Our pear trees are over 100 years old and they
7 are producing and have been producing for generations
8 and we hope that they continue to produce for
9 generations.

10 The water that we have, the -- the air that we
11 have, the cold, this is -- this is -- Obviously, we
12 have passion here, and we want to keep it here, and we
13 love this place, and we want to preserve it. And we've
14 been working for generations to preserve it and then we
15 hope that you help us with that.

16 And next.

17 (Exhibit displayed on screen.)

18 WINESS HEMLY: We live here. This is -- Our
19 children grow up here. We take care of this place and
20 we take care of -- If you ask my husband and my family
21 what they do, we grow food for people to eat. It's our
22 passion is making things thrive, making things grow,
23 making our children grow, making our community --
24 community grow, making California grow, and making the
25 world grow.

1 These pears have gone to World War I. These
2 pears have gone to World War II. Your parents have had
3 these pears. Your great-grandparents have had these
4 pears. This -- This is your story, so help us preserve
5 this.

6 Next slide.

7 (Exhibit displayed on screen.)

8 WINESS HEMLY: So, speaking specifically for
9 Hemly Cider, this is six generations of farming. I am
10 an outsider coming in and viewing this amazing
11 agricultural community. It's not something that you
12 can understand unless you get inside of it.

13 The sacrifices that have been made for
14 generations. Generations of people -- No vacations.
15 We're seven days a week, 12 hours a day. What you've
16 given up year after year, generation after generation,
17 feeding the world, feeding the planet, growing
18 businesses.

19 The families that we have here are employees.
20 Everything that is -- that we're working on preserving,
21 that is something when I was making our cider that we
22 were thinking, well, we have to preserve that, we have
23 to put that in a bottle. We want to get that out for
24 people to taste. We want to get Courtland out there.
25 We want to get the Delta out there. This is a unique

1 and special place that we are obviously very passionate
2 about.

3 CO-HEARING OFFICER DODUC: Who are the people
4 in the middle?

5 WINESS HEMLY: So that is the Hemlys. So
6 that's -- I don't know if you know the-- Doug and Cathy
7 Hemly, and this is Doug's father who, when -- Is it
8 okay if I go off script?

9 CO-HEARING OFFICER DODUC: Well, I -- I asked
10 the question, so, yes, please.

11 (Laughter.)

12 WINESS HEMLY: So these are -- So they are the
13 ones that actually started the corporation of Green &
14 Hemly, and he -- Our cheesy story of the Hemly life.
15 He -- Hemly Cider is basically named after him. He was
16 the last Hemly, and he was -- Here's my story. Sorry.

17 His -- He was the last Hemly. He had two
18 older daughters and then he had Doug Hemly. And Doug
19 Hemly, on -- sorry -- on the day that his daughter
20 Virginia was born, his father passed away, and he
21 didn't know if he was going to have the family line
22 continue or not. He didn't know that another son would
23 be born.

24 And so these -- This couple here is the
25 inspiration behind naming our cider Hemly Cider, that

1 that name and that tradition can continue on past us.
2 So it is a special -- special kind of connection that
3 we have with them.

4 CO-HEARING OFFICER DODUC: Thank you,
5 Miss Ansley, for not objecting to my outside-the-scope
6 question.

7 WINESS HEMLY: Next slide.

8 (Exhibit displayed on screen.)

9 WINESS HEMLY: So this is Hemly Cider. This
10 is our history in a bottle.

11 And we are a unique company. There is no
12 other company that we know of in the United States that
13 can do this. This is state-grown pear cider that we're
14 doing.

15 To make this cider, we travel to -- well,
16 we -- I got to -- this is really hard -- traveled to
17 France, traveled to England, finding a cider that was
18 unique to the United States to bring it into
19 California.

20 And think of it as a true California cider
21 with all these pieces of French winemaking and
22 Tasmanian -- I had to go down to Tasmania and find this
23 cider, to make it and bring it back here, this truly
24 unique product that we are now hoping to spread
25 throughout California and the United States.

1 And don't worry. If you'd like to taste some,
2 I brought some for you. I wouldn't want to hold that
3 back from you.

4 So, this is one of our innovative new products
5 that's coming out of the Delta that's feeding the
6 farm-to-fork movement.

7 Sacramento is focusing on this farm-to-fork
8 movement. It's an important aspect as far -- It's --
9 It's been growing in Sacramento. The Kings put a lot
10 behind that farm-to-fork movement. And so this is not
11 just a minor thing that's going to be going away any
12 time soon.

13 And the face of that farm-to-fork movement is
14 farms and farmers. And what are we -- Why would we be
15 destroying them and -- and getting rid of something
16 that is so precious and unique in this? Things that we
17 can never, ever, ever get back.

18 Let me go to the next slide.

19 (Exhibit displayed on screen.)

20 WINESS HEMLY: So we are not the only really
21 cool people out in the Delta. There's some really
22 other fun, interesting guys going out.

23 So this is Muddy Boot wine, another
24 generational grape-growing trio. We've got David, Phil
25 and -- and . . . Merwin. (Laughing.)

1 They recently launched their Muddy Boot wine
2 and have been having success, particularly with their
3 chenin blanc. And, again, it's -- it's a product that
4 is grown in the Delta that you cannot grow other
5 places, and these guys are out there killing it every
6 day.

7 And next slide.

8 (Exhibit displayed on screen.)

9 WINESS HEMLY: We not only have -- So wine.
10 There's a new generation of wine coming up.

11 But the cool thing about the Delta now is this
12 transition, since I moved there, into agritourism,
13 where you actually have people coming out and being
14 able to stop in places like Steamboat Landing that just
15 recently opened that features the lot of the
16 farm-to-fork food and a lot of the craft beers.

17 And people can come and visit their farm and
18 go pick pears, and they get to actually come out into
19 the Delta and see this area.

20 And you constantly get people commenting on
21 the beauty of the area. They're released from
22 particularly the Bay Area, coming from cities. It's
23 not like anything in California. You come for -- You
24 get to drive for an hour and then you're in a different
25 world. And you're back in time. And you get to

1 experience all this. And there are businesses that are
2 growing on this concept.

3 The tunnels would destroy these businesses.
4 This is not -- This is not something that is going to
5 help improve any of this. And this is something that
6 people from the Bay Area are benefiting from, that
7 as -- as cities get denser, where are these open
8 spaces? And where are these release? And having
9 somewhere close like this is very beneficial.

10 Next slide.

11 (Exhibit displayed on screen.)

12 WINESS HEMLY: So this is another really
13 awesome project, I think. This is Charles Wilson Jr.'s
14 project where he is another generational pear farmer
15 out in the Delta.

16 But he's developed these really cool fresh
17 fruit boxes where he delivers them directly to
18 companies in, particularly, San Francisco. So we're
19 getting away from junk food and vending machines, and
20 then he's delivering fresh fruit to offices once a
21 week. And he's -- His marketing and everything has
22 been fantastic, and he's seeing success and growth in
23 his new projects as well.

24 These tunnels takes that all away.

25 Next slide.

1 (Exhibit displayed on screen.)

2 WINESS HEMLY: So, in conclusion, I am
3 concerned that the tunnels are going to affect these
4 generations of hard work. That they are going to tear
5 our families apart. They're going to shut our
6 businesses down. That this is not in the public
7 interest. This is not in California's interest. This
8 is not in the interest of us going forward.

9 And please don't sacrifice my children.

10 MS. MESERVE: Thank you, Miss Hemly.

11 That concludes this direct testimony.

12 CO-HEARING OFFICER DODUC: All right. Let us
13 take a break before we get to cross-examination.

14 Let me do a bit of housekeeping before we do,
15 just in case in the rush to wrap up by 5:00, I forgot.

16 First of all, Miss Morris is no longer here,
17 but I'm sure she'll hear.

18 The clarification provided by counsel.
19 Rebuttal scope includes evidence that is responsive to
20 evidence introduced in connection with another party's
21 case in chief, including case in chief's witnesses'
22 testimony on cross.

23 Other housekeeping matter is: We are not
24 quite sure yet where we're going to be tomorrow. We
25 originally had scheduled it for the Sierra Hearing

1 Room, but there may be an audio/visual Webcasting
2 issue. So we might be in the huge Byron Sher instead.

3 Please do check in Sierra first, and if we do
4 change location, a sign will be posted.

5 Did I say that right? Okay.

6 Any other housekeeping matter?

7 MS. MESERVE: Should we check on how much
8 cross we have? Because I think we do have an
9 additional panel here today and I'm not sure --

10 CO-HEARING OFFICER DODUC: I don't believe
11 we'll get to your next panel, Miss Meserve, because I
12 have at least an hour by DWR, possibly 10 minutes by
13 State Water Contractor -- I'm sorry. DWR was 30 to 40
14 minutes.

15 MS. ANSLEY: Yeah.

16 CO-HEARING OFFICER DODUC: State Water
17 Contractors may be 10 minutes, Restore the Delta five
18 minutes, and CSPA 20.

19 Anyone else?

20 MS. DES JARDINS: Yes. I had about 45
21 minutes.

22 CO-HEARING OFFICER DODUC: So we will not get,
23 Miss Meserve, to your other panel today.

24 MR. RUIZ: That was my question. Thank you.

25 MS. ANSLEY: I will say, if it's helpful right

1 now, that there are a couple witnesses that I do not
2 have questions for. I know it is very late in the day
3 and they may be tired.

4 If it helps, I can tell you who those
5 witnesses are, and I don't know of any other people --
6 I didn't do any informal polling, but I just thought as
7 a courtesy I'd --

8 CO-HEARING OFFICER DODUC: Okay.

9 MS. ANSLEY: -- let you know.

10 CO-HEARING OFFICER DODUC: Who are they?

11 MS. ANSLEY: I know I do not have questions
12 for Miss -- Miss Hemly. I do not have questions for
13 Mr. Wilson. So those two people.

14 And then, let me see . . .

15 CO-HEARING OFFICER DODUC: Surely you must not
16 have questions for Dr. Shilling.

17 MS. ANSLEY: (Shaking head.)

18 He's not off the hook yet.

19 I apologize. I think maybe just those two.

20 But --

21 CO-HEARING OFFICER DODUC: Okay.

22 MS. ANSLEY: -- if it helps their schedule, I
23 just want to make that known.

24 CO-HEARING OFFICER DODUC: I just want to make
25 sure we're not missing -- Does anyone else have

1 cross-examination for Miss Hemly or Mr. Wilson?

2 Mr. Jackson.

3 MR. JACKSON: I do have questions for
4 Miss Hemly, but I could forego them if it's important
5 for her to get out of here tomorrow -- tonight.

6 WINESS HEMLY: No, I'm okay. I'm all right.

7 CO-HEARING OFFICER DODUC: Please,
8 Mr. Jackson, you estimate what? Five, 10 minutes?

9 MR. JACKSON: Something like that.

10 CO-HEARING OFFICER DODUC: Because I would
11 suggest that, after the break, we start with you and
12 your question for Miss Hemly.

13 MR. JACKSON: Thank you.

14 CO-HEARING OFFICER DODUC: All right.

15 Miss Des Jardins?

16 MS. DES JARDINS: I also have some questions
17 for Miss Hemly. Might be about 10 minutes.

18 CO-HEARING OFFICER DODUC: Okay.

19 MS. ANSLEY: Okay. I --

20 CO-HEARING OFFICER DODUC: And Mr. Stroshane.

21 MR. STROSHANE: I only have one ques -- one or
22 two questions for Dr. Shilling. Could I ask them also
23 as part of this code of reassurance?

24 CO-HEARING OFFICER DODUC: Let's do that and
25 then -- So when we return from break, we will ask

1 Mr. Jackson to conduct his cross-examination of
2 Miss Hemly for five to 10 minutes, Miss Des Jardins for
3 another 10 minutes.

4 Mr. Stroshane will then ask his question of
5 Mr. -- Dr. Shilling for, he said, one or two questions.

6 And then we'll get to Miss Ansley, you and
7 your cross-examination.

8 Does that sound --

9 MS. ANSLEY: Sure.

10 CO-HEARING OFFICER DODUC: Understood?

11 All right. We will return at -- Oh, I'll give
12 you a short break. 10 -- 4 o'clock.

13 (Recess taken at 3:48 p.m.)

14 (Proceedings resumed at 4:00 p.m.):

15 CO-HEARING OFFICER DODUC: All right.

16 Everyone take your seats, please.

17 And, Mr. Jackson, you have other questions
18 on -- for cross-examination other than Miss Hemly;
19 right?

20 MR. JACKSON: I do if Dr. Shilling's going to
21 be back tomorrow.

22 CO-HEARING OFFICER DODUC: So, yes, just do
23 Miss Hemly --

24 MR. JACKSON: I will.

25 CO-HEARING OFFICER DODUC: -- even though I

1 will be really sad to see her leave.

2 CROSS-EXAMINATION BY

3 MR. JACKSON: Miss Hemly, my name is Michael
4 Jackson. I'm an attorney for the California
5 Sportfishing Protection Alliance, a group called
6 AquAlliance in the Sacramento Valley, and a group in
7 Santa Barbara called the California Water Impact
8 Network.

9 The questions will be about public interest.

10 But what was put on by the panel was sort of
11 the -- the past.

12 Do you have children?

13 WINESS HEMLY: I do.

14 MR. JACKSON: How many?

15 WINESS HEMLY: Two boys.

16 MR. JACKSON: What are their ages?

17 WINESS HEMLY: Six and eight.

18 MR. JACKSON: If you can, can you define what
19 would be in their interest about the Delta With-Project
20 and Without-Project for the future.

21 WINESS HEMLY: I can give you -- So we'll
22 start with their current, what's happening, what --
23 what -- what they see the future as today without the
24 tunnels.

25 Today, they have -- they are lucky. They have

1 both of their grandparents living in the Delta. My
2 parents live in Courtland, and they're -- my husband's
3 parents live in Courtland as well, so they're
4 surrounded by family.

5 They're surrounded by a community who knows
6 and has grown up with their father and teachers and
7 everyone. It's kind of common in the Delta that, you
8 know, they're not going to get away with anything
9 because everyone knows who they are and they're going
10 to -- they're going to come tell me. If something goes
11 wrong, we have a loving, wonderful community around us.

12 They both attend Clarksburg Charter School
13 where they -- where they have an agriculture-focused
14 education. They have an amazing education.

15 And with schools -- As we're finding out, it's
16 not about the school but the people that go there. And
17 the community that's there already, it's been so
18 amazing and supportive, that I can drop my kids off and
19 work full-time and my husband can go and farm and we
20 never worry about them for a second because of the
21 support that we have.

22 They have outdoor classrooms. They have their
23 garden going on. They will be . . .

24 So jump to the tunnels going in. Jump to land
25 being seized. Jump to the roads being closed. Jump to

1 our trucks not being able to get in and out of harvest.
2 Jump to the water being polluted, potential salt water
3 getting into the orchards and our trees dying. Jump to
4 maybe us having to sell off everything.

5 Where are we going to go? We're going to have
6 to rip them away from that. We're going to have to
7 figure out -- Maybe it won't be so extreme, but from
8 what we've seen, that's what we're looking at, is
9 shutting our doors and having to either have our land
10 seized or sell it for next to nothing.

11 We -- We are looking at uncertainty where they
12 were looking at an amazing future with a childhood of
13 support. They're looking at perhaps the opportunity to
14 take on the next generation of being a farmer, the next
15 generation of being cider makers, the next generation
16 of promoting agriculture and food in California
17 to . . . what?

18 It's -- It's heartbreaking for us to have to
19 think about that, and we've -- you know, we have to
20 make those plans, the contingency plans.

21 For a while, the -- one of the tunnels was
22 going right on top of the family house that was built
23 by hand with tools that were made by hand in 1860 by
24 great-great-great-great-great-great-grandfather and
25 losing all of that for what?

1 We don't -- For something that . . . that
2 brings up a lot of emotion. You've dealt with the
3 facts here, but this is -- for us, it would tear our
4 family apart. They would grow up without grandparents,
5 without support, without a future.

6 MR. JACKSON: But what you described is only
7 temporary; right?

8 WINESS HEMLY: Sure. Maybe for -- If -- If we
9 are sacrificed, I guess that's -- for the sacrifice,
10 that's what it is.

11 MR. JACKSON: And the temporary work that
12 happens in their lives, can that be replaced?

13 WINESS HEMLY: I don't know that they matter.

14 MR. JACKSON: So in regard to their -- their
15 education, what would this do to the Charter School?

16 WINESS HEMLY: Well, with the Charter School
17 being so close to -- on the other side of the river,
18 we've -- I've heard a little bit about the impacts of
19 the high school.

20 I haven't heard anything about the impacts to
21 the Charter School. I'm assuming that the sound is
22 going to be disruptive. The trucks going through will
23 be disruptive. Whether or not we can -- The -- The
24 traffic on the roads, whether you can get your children
25 to school. The teachers, if they're going to be able

1 to keep . . .

2 Do you -- I -- I'm not sure. It doesn't look
3 good. And the fact that we might not even be able to
4 stay there is a moot point.

5 So families leaving and moving away. And if
6 jobs are lost. A lot of the children that attend
7 schools are working in the Delta as well. It's a
8 community school, so if the children are gone and the
9 teachers are gone, then what's the future of
10 Clarksburg?

11 MR. JACKSON: In terms of safety, is it --
12 Does -- Do you expect that it would make a difference
13 to your two boys with or without the Project on the
14 roads? On the levees?

15 WINESS HEMLY: I -- If you have never driven
16 on a levee with a semi, then you can close your eyes
17 and pretend that that's going to be a wonderful thing.

18 But if you have driven on the levee roads with
19 heavy truck traffic, you know that every single day is
20 a gamble, and that when you see people driving quickly
21 where they've talked about frustrated drivers that are
22 booked up through traffic, that's just not -- that's
23 not something that you should, "Oh, it's a frustrated
24 driver." These people try to pass, and when you're
25 passing on these turns, and I don't know how many times

1 I've come within seconds of losing my life, and then
2 that is going to be increased daily as people try to
3 get around these trucks and these -- this construction
4 equipment.

5 And then I've had this going -- ongoing battle
6 in my head. What do I do with my children in the car?
7 Do I run into the river? Do I run head on into the
8 traffic? Do I run head on into a truck? And how --
9 how -- These are conversations I've already had with
10 myself and these are daily -- daily occurrences.

11 MR. JACKSON: Are -- Are your two boys aware
12 that this is happening?

13 WINESS HEMLY: They are not aware right now, I
14 don't think. We -- We try to keep them in the
15 day-to-day of . . .

16 MR. JACKSON: So if the 17 years of
17 construction and planning starts next year, do you
18 suppose that that 17 years will be important in their
19 lives?

20 WINESS HEMLY: Absolutely. It'll be a
21 different future for them.

22 MR. JACKSON: Thank you.

23 CO-HEARING OFFICER DODUC: Thank you,
24 Mr. Jackson.

25 Mr. Stroshane.

1 I'm just going in group number, and you're
2 before Miss Des Jardins.

3 MR. STROSHANE: (Nodding head.)

4 My name is Tim Stroshane. I am a policy
5 analyst with Restore the Delta.

6 And my questions are for -- for
7 Mr. Shilling -- Dr. Shilling.

8 CROSS-EXAMINATION BY

9 MR. JACKSON: On -- In your testimony, in your
10 conclusion, is it your opinion that the changes in the
11 Petition Project will unreasonably affect fish and
12 wildlife, human well-being, in Delta communities,
13 regional water management, and regional -- region- and
14 State-scale water sustainability?

15 WITNESS SHILLING: Could I ask for a
16 clarification?

17 When you say "the change," do you mean to
18 getting a new intake to the north compared to having it
19 in the south?

20 When you say --

21 MR. JACKSON: Well, the changes in -- that are
22 represented in the Petition for the -- for the water
23 rights would be the new --

24 WITNESS SHILLING: Right.

25 MR. JACKSON: -- intakes in the north, yes.

1 WITNESS SHILLING: Yeah. I think that the --
2 In my opinion, the -- those changes would affect a lot
3 of things, including fish and wildlife and other
4 aspects of public interest along the entire corridor
5 with specific places where it's more intense, and then
6 for the whole region as a whole because it bisects the
7 region.

8 MR. STROSHANE: Um-hmm.

9 Given all of the aspects that you've listed in
10 your conclusion, is it reasonable to conclude that you
11 think that the Petition Project is an unreasonable
12 method of diversion?

13 WITNESS SHILLING: That's interesting.

14 CO-HEARING OFFICER DODUC: Is there an
15 objection, Miss Ansley?

16 I only say that because I see her walking
17 towards the microphone.

18 MS. ANSLEY: I think I'd say objection: Calls
19 for a legal conclusion as to what is an "unreasonable"
20 type of diversion.

21 Of course, there -- he can clarify by what he
22 means by "unreasonable," whether that's a legal term of
23 art or just a general opinion, I suppose.

24 MR. STROSHANE: Well, I'm asking about whether
25 all of the -- the -- His opinion in his conclusion --

1 CO-HEARING OFFICER DODUC: Right.

2 MR. STROSHANE: -- lists a number of things
3 that he thinks are unreasonable about the Project, so
4 I'm not even asking about some legal aspect of this.

5 CO-HEARING OFFICER DODUC: You're asking for
6 his opinion.

7 MR. STROSHANE: And I'm asking for his opinion
8 on whether --

9 CO-HEARING OFFICER DODUC: All right.

10 MR. STROSHANE: -- he thinks that makes it
11 a -- an unreasonable method of diversion.

12 WITNESS SHILLING: Well, I'll try not to take
13 the method of diversion part too literally.

14 And I'll say, generally, from -- from whatever
15 the mechanism is at the shoreline, diverting a large
16 portion of the river flow to uses to the south and the
17 method that's being proposed does have significant and
18 in the EIR recognized non-mitigated impacts and then
19 also mitigated impacts.

20 And I think, from a -- certainly interregion
21 or state point of view, it's unreasonable in that it
22 essentially sacrifices one part of the state for the
23 benefit of another part of the state without ever
24 explicitly saying that.

25 I don't think that's reasonable or in the

1 public interest. So if that -- that level of answer is
2 what you're looking for.

3 MR. STROSHANE: Thank you.

4 No further questions.

5 CO-HEARING OFFICER DODUC: And does that
6 conclude your cross-examination --

7 MR. STROSHANE: Yes, it does.

8 CO-HEARING OFFICER DODUC: -- of this panel?

9 Thank you, Mr. Stroshane.

10 Miss Des Jardins, how much time to you need
11 for your questions of Miss Hemly?

12 MS. DES JARDINS: Oh, I'd like about 10
13 minutes, please.

14 CO-HEARING OFFICER DODUC: All right. We'll
15 take that 10 minutes from your 45.

16 MS. DES JARDINS: Thank you.

17 Dierdre Des Jardins with California Water
18 Research.

19 CROSS-EXAMINATION BY

20 MS. DES JARDINS: And I'd like to go to
21 Exhibit SWRCB-102, the Final EIR/EIS, Chapter 29 on
22 climate change, Page 29-16.

23 And while the assistant is pulling that up,
24 I'd like to say:

25 Miss Hemly, you talked about your sons and

1 their future. And I wanted to ask you -- Can -- Can we
2 go to Chapter 29 of the Final EIR/EIS, please.

3 (Exhibit displayed on screen.)

4 MS. DES JARDINS: I wanted to ask you about
5 climate change.

6 Let's go to Page 16.

7 (Exhibit displayed on screen.)

8 MS. DES JARDINS: And it states (reading):

9 "The location of the North Delta
10 diversion facility is further inland" --
11 at Line 34 -- "making it less vulnerable
12 to salinity intrusion. Even with
13 substantial sea level rise and critically
14 dry upstream conditions, salinity could
15 be repelled from this location."

16 And I'll skip down to Line 4 (reading):

17 "Alternatives" --

18 No.

19 Yeah.

20 (Reading):

21 "Alternatives 1A-2C, 3, 4, and 5
22 would allow the Delta to be managed in a
23 number of different ways, including
24 maintaining salinity as it is currently
25 managed or allowing salinity to fluctuate

1 more freely in the Delta as it did prior
2 to the development of upstream
3 reservoirs."

4 And I wanted to ask you, Miss Hemly: Were you
5 aware of this potential operation of the Delta tunnels?

6 MS. MESERVE: Objection: Vague.

7 What do you mean by "operation"?

8 MS. DES JARDINS: Would -- Are -- Are you
9 aware that they could potentially allow -- that
10 Petitioners are proposing to potentially allow salinity
11 to fluctuate more freely in the Delta as it is -- as it
12 did prior to the development of upstream reservoirs?

13 WINESS HEMLY: Prior to development of
14 upstream reservoirs? Like -- I'm not an expert
15 in . . .

16 MS. DES JARDINS: This would indicate
17 that . . . that, in critically dry conditions or
18 substantial sea-level rise, that the Projects might not
19 continue to maintain salinity control in the Delta as
20 they're current -- as they currently do.

21 Are -- Are you aware of that potential
22 operation of the tunnels?

23 WINESS HEMLY: I'm not aware of this specific
24 one, but we have -- we are aware that salt water
25 intrusion is very real possibility with the tunnels.

1 MS. DES JARDINS: If in the future salinity
2 control in the Delta was abandoned during critically
3 dry conditions, would it affect your farm?

4 WINESS HEMLY: Absolutely.

5 MS. ANSLEY: Objection: Incomplete
6 hypothetical; calls for speculation.

7 Just generally, if salinity was increased in
8 the future, would it affect her farm? What levels --

9 CO-HEARING OFFICER DODUC: I think she
10 meant --

11 MS. ANSLEY: Objection: Lack of foundation.

12 THE COURT: I believe she --

13 MS. DES JARDINS: I -- I believe this
14 paragraph gives foundation.

15 CO-HEARING OFFICER DODUC: Miss Des Jardins,
16 let me rule.

17 I am overruling. It is a general question;
18 therefore, the witness might answer in general terms.

19 WINESS HEMLY: In general, if salt water
20 waters your plants, that would kill them. So, yes,
21 that would be a very bad thing in general.

22 MS. DES JARDINS: And if this was done as an
23 adaptation to sea-level rise within your sons'
24 lifetimes, would that affect your farm?

25 MS. ANSLEY: Vague and ambiguous --

1 CO-HEARING OFFICER DODUC: Miss Ansley.

2 MS. AUFDEMBERGE: -- as to "adaptation to
3 sea-level rise."

4 And -- And I -- The entire line of questioning
5 is vague and ambiguous as to concentration as well.

6 CO-HEARING OFFICER DODUC: Given that I don't
7 believe this witness is an expert witness in climate
8 change --

9 Unless you are, Miss Hemly.

10 WINESS HEMLY: No.

11 CO-HEARING OFFICER DODUC: -- I don't believe
12 specificity would help.

13 So unless the -- Miss Hemly's attorneys
14 object, Miss Des Jardins may proceed with her general
15 question.

16 And we'll -- Miss Ansley, your objections
17 might go to the weight of the evidence being provided.

18 MS. DES JARDINS: If -- If there was less
19 fresh water used than currently to repel salinity in
20 the Delta, or -- or your -- your farm became saltier as
21 a result of the proposed -- the adaptation to climate
22 change and the use of the tunnels, what would that do
23 to your -- your farm in your -- your -- when you're in
24 your sons' lifetime?

25 WINESS HEMLY: I think -- Is it my

1 understanding that the question is: If the inadequate
2 planning of the EIR does not account for climate change
3 and we do not have enough fresh water to flush out
4 salt, does that affect us?

5 Is that -- Is that what you're . . .

6 MS. DES JARDINS: Yes. If -- If there's not
7 sufficient planning for climate change, or part of the
8 planning is to eventually use less water or not repel
9 salinity, would -- would that affect your farm? Would
10 that affect your farm and your -- and your family?

11 WINESS HEMLY: Absolutely. Salt water
12 intrusion is a very serious concern for the future of
13 the -- of farming in the Delta.

14 MS. DES JARDINS: Okay. And the next thing
15 I'd like to ask about:

16 Since your farm is within the tunnel
17 alignment, I believe --

18 I'd like to go to Exhibit DDJ-150, please.

19 CO-HEARING OFFICER DODUC: Let's establish a
20 foundation:

21 Is your farm within the projected -- What was
22 it, Miss Des Jardins?

23 MS. DES JARDINS: She stated in earlier
24 testimony that her farm was in the projected tunnel --

25 THE COURT: And I believe --

1 MS. DES JARDINS: -- footprint.

2 CO-HEARING OFFICER DODUC: -- she mentioned it
3 was from an earlier proposal, but let's let Miss Hemly
4 address that.

5 Do you know whether, as currently proposed,
6 your farm would be within the disturbed area of
7 construction?

8 WINESS HEMLY: Yes.

9 CO-HEARING OFFICER DODUC: Yes.

10 MS. DES JARDINS: And I have a very specific
11 question:

12 Is it possible that, if it's within -- Do you
13 think it could be within the tunnel route; correct?

14 MS. MESERVE: Vague and ambiguous.

15 Can you show -- Were -- Did you have a --

16 MS. DES JARDINS: She -- That's what she
17 stated. I wanted to ask, on Page 10 of this
18 document --

19 (Exhibit displayed on screen.)

20 MS. DES JARDINS: Keep going.

21 (Exhibit displayed on screen.)

22 MS. DES JARDINS: There's -- There's standards
23 that were introduced by an expert, Tom Williams, on
24 testimony in Part 1 about -- These are the BART
25 facility standards for tunn -- for excavation under --

1 tunneling under delicate structures.

2 It specifies settlement detection devices,
3 taking and recording readings not less than once per
4 week during performance of the work.

5 Let's scroll down to the next page.

6 (Exhibit displayed on screen.)

7 MS. DES JARDINS: (Reading):

8 "Stop work; notify the Engineer, and
9 take immediate remedial action if
10 movement of the existing structure occurs
11 during performance of . . . work."

12 CO-HEARING OFFICER DODUC: And your question,
13 Miss Des Jardins?

14 MS. ANSLEY: I'd like --

15 MS. DES JARDINS: Would these kind of
16 protective specifications make you less -- less
17 concerned about the potential impacts on your -- is
18 it -- on your older farmhouse?

19 Isn't it, like, a hundred years old?

20 MS. ANSLEY: I --

21 CO-HEARING OFFICER DODUC: Miss Ansley.

22 MS. ANSLEY: Objection: Compound.

23 I also . . .

24 CO-HEARING OFFICER DODUC: I think --

25 MS. ANSLEY: Yeah. Also object -- Also I'm so

1 tired.

2 I also object to the -- the lengthy testimony
3 that always goes into the beginning of every question
4 which -- which characterizes the documents usually in
5 front of the witness instead of asking the witness
6 whether they're, one, familiar with these
7 specifications and, two, whether they have any
8 testimony to add that would aid the Hearing Officers.

9 So --

10 MS. DES JARDINS: There --

11 MS. ANSLEY: -- those are --

12 THE COURT: Thank you.

13 MS. ANSLEY: -- both my objections.

14 MS. DES JARDINS: There is --

15 THE COURT: Hold on.

16 MS. DES JARDINS: -- testimony --

17 THE COURT: Hold on.

18 MS. DES JARDINS: -- on this --

19 CO-HEARING OFFICER DODUC: Miss Des Jardins --

20 MS. DES JARDINS: Yeah.

21 CO-HEARING OFFICER DODUC: -- stop.

22 MS. DES JARDINS: Yeah.

23 CO-HEARING OFFICER DODUC: Miss Hemly, to what
24 extent are you familiar with excavation support and
25 protection . . . requirements and systems?

1 WINESS HEMLY: Not -- Not my area of
2 expertise.

3 CO-HEARING OFFICER DODUC: Are you able . . .
4 to provide any input on these installation
5 requirements?

6 WINESS HEMLY: No.

7 MS. DES JARDINS: Are -- Do you have some
8 concerns that tunneling under your farmhouse could
9 affect the structure?

10 WINESS HEMLY: I think my understanding is,
11 the tunnels will go -- the intake is going next to.

12 MS. DES JARDINS: Okay.

13 WINESS HEMLY: I don't think we're -- we're
14 going to be tunnelled under.

15 MS. DES JARDINS: Under. Okay. So this is
16 inapplicable.

17 Thank you.

18 That -- That concludes my questioning.

19 CO-HEARING OFFICER DODUC: Thank you,
20 Miss Hemly.

21 You can sit back and relax, and also
22 Mr. Wilson, I believe. There's no cross-examination
23 for either of you.

24 I will now turn it over to Miss Ansley.

25 MS. ANSLEY: Thank you.

1 MS. MESERVE: And if these two witnesses would
2 like to leave, they -- they may, or if they would like
3 to stay, they may; correct?

4 CO-HEARING OFFICER DODUC: Yes. Thank you.
5 Thank you for coming. Thank you for sharing your
6 perspective and your stories.

7 WITNESS WILSON: It's been fun.

8 (Witness Wilson excused.)

9 MS. ANSLEY: Hi, my name is Jolie-Anne Ansley.
10 I'm with the Department of Water Resources.

11 The topics that I have for my
12 cross-examination are traffic impacts, noise impacts,
13 and specific -- which applies to both the witnesses but
14 specifically for Dr. Shilling -- sustainability issues.

15 And I will endeavor to cut them down so that
16 we can get out of here.

17 CO-HEARING OFFICER DODUC: We will be stopping
18 at 5:00 or earlier.

19 MS. ANSLEY: Yeah.

20 CROSS-EXAMINATION BY

21 MS. ANSLEY: My first few questions are for
22 Mr. Stirling.

23 Good afternoon.

24 WITNESS STIRLING: Hi.

25 MS. ANSLEY: Could we bring up LAND-207?

1 (Exhibit displayed on screen.)

2 MS. ANSLEY: Thank you.

3 Mr. Stirling, did I hear you provide testimony
4 regarding this exhibit in which you said that the
5 construction of the Delta tunnels would go on for at
6 least 18 years?

7 WITNESS STIRLING: The whole process.

8 MS. ANSLEY: Oh, okay.

9 WITNESS STIRLING: The whole process, but the
10 construction phase itself will be 13 years.

11 MS. ANSLEY: Okay. Thank you. That's one.

12 Can we call up LAND-120, please.

13 (Exhibit displayed on screen.)

14 MS. ANSLEY: And can we zoom out so we can see
15 most of the --

16 (Exhibit displayed on screen.)

17 MS. ANSLEY: That's fine.

18 And I believe you refer to this exhibit both
19 in your oral testimony as well as in your written --
20 written testimony; is that correct?

21 WITNESS STIRLING: Say it again, please. I'm
22 sorry.

23 MS. ANSLEY: I apologize. It's late. I'm
24 tired. I'm sorry if I speak too fast.

25 WITNESS STIRLING: And I don't hear very well,

1 so . . .

2 MS. ANSLEY: We'll work together.

3 So, do you see the figure on the screen.

4 WITNESS STIRLING: Yes, I do.

5 MS. ANSLEY: This is LAND-120.

6 Do you recognize this figure.

7 WITNESS STIRLING: Yes. I used it in my own
8 proposal.

9 MS. ANSLEY: Okay. So you used this in your
10 written testimony; is that correct?

11 WITNESS STIRLING: Yes.

12 MS. ANSLEY: Okay. Did you prepare this
13 figure?

14 WITNESS STIRLING: Did I prepare it? Of
15 course not.

16 MS. ANSLEY: Do you know who did prepare it?

17 WITNESS STIRLING: I don't know that.

18 MS. ANSLEY: And so you don't know who
19 identified -- You see on the bottom how this is labeled
20 Tunnel/WaterFix Impacts? If you --

21 WITNESS STIRLING: Yes --

22 MS. ANSLEY: -- look at the bottom.

23 WITNESS STIRLING: -- I think that's correct.

24 MS. ANSLEY: And --

25 WITNESS STIRLING: So I assume that was

1 prepared by Department of Water Resources.

2 I can't see it that far.

3 MS. ANSLEY: Yeah. I can't, either, at the
4 moment.

5 Oh, look.

6 (Exhibit displayed on screen.)

7 MS. ANSLEY: But you don't know who labeled
8 the impacts on this figure; is that correct?

9 WITNESS STIRLING: No.

10 MS. ANSLEY: Okay.

11 WITNESS STIRLING: I don't know who BSK is,
12 no.

13 MS. ANSLEY: And can we pull up LAND-3 really
14 fast, which you also refer to in your testimony on
15 Page 4.

16 (Exhibit displayed on screen.)

17 MS. ANSLEY: So can we zoom out again.

18 (Exhibit displayed on screen.)

19 MS. ANSLEY: I have the exact same questions
20 regarding this exhibit on the screen, which is LAND-3.

21 MS. MESERVE: I might just ask a clarifying
22 question.

23 LAND-3 was Part 1 evidence which has already
24 been admitted, so --

25 MS. ANSLEY: Actually, this testimony -- this

1 exhibit was not admitted into evidence according to the
2 Water Board's hearing site. It was excluded from
3 evidence.

4 MS. MESERVE: I don't believe that's
5 correct --

6 MS. ANSLEY: That can --

7 MS. MESERVE: -- but I --

8 MS. ANSLEY: That can be subject to check but
9 I have only --

10 CO-HEARING OFFICER DODUC: Hold on.

11 MS. ANSLEY: -- a few questions.

12 Oh, go ahead.

13 CO-HEARING OFFICER DODUC: Just go ahead and
14 ask your question and we will check on that.

15 MS. ANSLEY: I believe we're looking at
16 the . . .

17 And, I'm sorry, I actually did have an excerpt
18 of the -- the ruling. I don't have it now, but I'm
19 happy to have that subject to check.

20 But I had only the same two questions.

21 CO-HEARING OFFICER DODUC: Let's just ask your
22 question about LAND-3.

23 WITNESS STIRLING: Are you suggesting that if
24 I don't -- did not have anything to do with the
25 preparation of these maps, or whatever, that somehow I

1 can't refer to them?

2 MS. ANSLEY: No, sir. I'm just asking you
3 whether you prepared these maps.

4 WITNESS STIRLING: Of course, I did not.

5 MS. ANSLEY: Okay. I can move on from that.

6 I believe I heard you say in your . . .

7 Just a second. I -- One second.

8 I apologize. I forgot your testimony.

9 I believe I heard you say during oral
10 testimony that Route 160 --

11 Is that the correct way to say it?

12 WITNESS STIRLING: Yeah.

13 MS. ANSLEY: -- was going to be permanently
14 relocated? Is that your understanding?

15 WITNESS STIRLING: Yes.

16 MS. ANSLEY: So it's not your understanding
17 that it would be temporarily relocated and moved back?

18 WITNESS STIRLING: I think I said in my -- I
19 think I said in my written statement that it would be
20 temporarily.

21 MS. ANSLEY: Okay.

22 WITNESS STIRLING: But I said in my oral
23 statement, that it was permanent.

24 MS. ANSLEY: And what would be your
25 understanding, if you'd like to clarify, which --

1 whichever you meant.

2 WITNESS STIRLING: What do you mean if I'd
3 like to clarify it?

4 MS. ANSLEY: Do -- Is it your understanding
5 that --

6 WITNESS STIRLING: I think I made a mistake
7 in -- in one part of it when I said that it was -- that
8 the modification of 160 would be permanent.

9 MS. ANSLEY: Okay. So looking at your
10 testimony, which is LAND-205-Errata -- And they will
11 bring that up and blow it up on the screen for you,
12 sir.

13 (Exhibit displayed on screen.)

14 MS. ANSLEY: On Page 7 of your testimony, you
15 discuss --

16 (Exhibit displayed on screen.)

17 MS. ANSLEY: -- impacts to noise due to pile
18 driving; is that correct?

19 WITNESS STIRLING: Yes.

20 MS. ANSLEY: Does your testimony also discuss
21 the various mitigation measures to be undertaken by the
22 California WaterFix to address noise impacts?

23 WITNESS STIRLING: No, it does not. My
24 testimony does not take that into consideration.

25 I don't really have a lot of confidence in,

1 quote, "mitigation practices," simply because they're
2 just used as kind of a way to soften the blow, and they
3 don't necessarily work that way.

4 MS. ANSLEY: And is the same true for your
5 testimony regarding traffic impacts? You don't discuss
6 the traffic mitigation measures of the California
7 WaterFix; is that -- is that correct?

8 WITNESS STIRLING: I -- I read them, but I did
9 not discuss them, that's correct, for the same reason.

10 MS. ANSLEY: Finally, can we look at Page 12.

11 I'm endeavoring to cut these down.

12 (Exhibit displayed on screen.)

13 MS. ANSLEY: And I believe this is my last
14 point for Mr. Stirling.

15 On Page 12, Lines 4 to 6, you say tha
16 (reading):

17 ". . . [5,404 acres of locally important,
18 statewide important, prime, and unique
19 farmland would be subject to temporary
20 use]."

21 Do you see that, sir?

22 WITNESS STIRLING: Yes.

23 MS. ANSLEY: Okay. Can we call up SWRCB-102,
24 Chapter 14, please.

25 (Exhibit displayed on screen.)

1 MS. ANSLEY: And can we go to Page 14-36.

2 (Exhibit displayed on screen.)

3 MS. ANSLEY: Can you see this chart, sir?

4 WITNESS STIRLING: I've seen that chart, yes.

5 MS. ANSLEY: And I believe you cite this chart
6 in your testimony; is that correct?

7 WITNESS STIRLING: I don't remember.

8 MS. ANSLEY: That's fine.

9 If you look at --

10 WITNESS STIRLING: It may be at the top of the
11 table a little bit lower down.

12 MS. ANSLEY: Well, this is from the FEIR.

13 WITNESS STIRLING: Okay. Well, I -- I -- I've
14 seen it but I don't . . .

15 MS. ANSLEY: I believe you cite it, sir, at
16 Page -- in your testimony, Page 12, Line 5.

17 WITNESS STIRLING: (Examining document.)
18 Okay.

19 MS. ANSLEY: Okay. And do you -- I'm sorry
20 for how difficult this can be to read. I know the
21 right screen is a lot less -- is a lot brighter and
22 easier to see.

23 If you look at Alternatives 4 and 4A in this
24 table, which is in the dead center of this table on the
25 screen.

1 And do you see that the total for temporary
2 short-term impacts to farmland is 1,495 acres?

3 WITNESS STIRLING: Well, I would accept that
4 but I think what I now realize is that 5,404 acres was
5 what was going to be taken for permanent use. That was
6 going to be how much farmland would be taken for
7 permanent use.

8 MS. ANSLEY: And if we look at the first half
9 of this table, on the left half, you see that this is
10 the permanent conversion of farmland. And under
11 Alt 4A, the subtotal is 3,909 acres.

12 Do you see that?

13 WITNESS STIRLING: Yes.

14 MS. ANSLEY: And then my final point was:
15 Isn't the 4,404 acres the grand total of both permanent
16 and temporary impacts?

17 WITNESS STIRLING: I thought I had separated
18 them by putting how many acres were -- that'd be taken
19 for -- taken permanently by the structures and then how
20 many acres would be taken for temporary use. That's
21 what I thought I had done.

22 But as I look at it quickly at this point, I
23 don't -- I don't see that.

24 MS. ANSLEY: Do you see that, on this chart --
25 I was merely trying to --

1 WITNESS STIRLING: I can barely --

2 MS. ANSLEY: -- clarify your testimony.

3 WITNESS STIRLING: -- see it, yes.

4 MS. ANSLEY: Okay. And that's all the
5 questions I have for you, Mr. Stirling.

6 Going on to Mr. Robinson.

7 Can we call up LAND-123, please.

8 (Exhibit displayed on screen.)

9 MS. ANSLEY: Do you recognize this exhibit?

10 WITNESS ROBINSON: Yes, I do.

11 MS. ANSLEY: This is the exhibit that you
12 reference in your testimony?

13 WITNESS ROBINSON: Correct.

14 MS. ANSLEY: Did you create this exhibit?

15 WITNESS ROBINSON: No.

16 MS. ANSLEY: Can we scroll down a little to
17 see if there's a footer on that?

18 (Exhibit displayed on screen.)

19 MS. ANSLEY: Do you know who created this?

20 WITNESS ROBINSON: No.

21 MS. ANSLEY: You know who -- who identified
22 the road segments of concern?

23 WITNESS ROBINSON: I don't remember if it was
24 the ones that I was concerned about for Walnut Grove.
25 I don't remember exactly.

1 MS. ANSLEY: But you relied on this exhibit in
2 framing your testimony for determining which road
3 segments were of concern?

4 WITNESS ROBINSON: For Walnut Grove.

5 MS. MESERVE: Objection: Misstates the
6 witness' testimony.

7 It says right here at the bottom where it's
8 from.

9 MS. ANSLEY: I'm not asking where it's from.
10 I'm asking who created this exhibit and who identified
11 road segments of concern.

12 CO-HEARING OFFICER DODUC: Overruled.

13 MS. ANSLEY: I believe you testified
14 that . . . you -- You testified that emergency response
15 times would increase --

16 WITNESS ROBINSON: Yes.

17 MS. ANSLEY: -- under the California WaterFix?
18 Do you base that on any particular traffic
19 analysis?

20 WITNESS ROBINSON: Empirical knowledge. I
21 mean, just more traffic, more backups.

22 MS. ANSLEY: Is it your understanding that the
23 FEIR -- which is the Final Environmental Impact
24 Report -- analyzed impacts due to traffic on emergency
25 services? Are you aware of that?

1 WITNESS ROBINSON: No.

2 MS. ANSLEY: Are you aware of the mitigation
3 measures proposed for traffic impacts in the FEIR for
4 the California WaterFix?

5 WITNESS ROBINSON: It's been awhile since I've
6 read them, but they . . . didn't seem like enough to
7 really make a difference for the proposed increase in
8 traffic.

9 MS. ANSLEY: And in your testimony, you cited
10 a number of roadways that were of concern to you and
11 their current volumes; is that correct? Their current
12 traffic volumes.

13 WITNESS ROBINSON: Correct.

14 MS. ANSLEY: Are you aware of how the level of
15 service for those roadways were established?

16 WITNESS ROBINSON: I am not sure I understand
17 what you're asking.

18 MS. ANSLEY: Okay. Let's see.

19 Can we look at your testimony, which is
20 188-Errata.

21 (Exhibit displayed on screen.)

22 MS. ANSLEY: Can we look at Page 4.

23 (Exhibit displayed on screen.)

24 MS. ANSLEY: Did you create this chart?

25 WITNESS ROBINSON: No.

1 MS. ANSLEY: Who created this chart?

2 WITNESS ROBINSON: I'm unsure.

3 MS. ANSLEY: You're unsure who put this chart
4 in your testimony.

5 Do you know where this chart comes from?

6 MR. KEELING: Objection: Mischaracterizes his
7 testimony.

8 He didn't testify as to uncertainty about who
9 put it in his tes -- in his testimony. He testi -- He
10 testified he was unsure about who created the chart.

11 Those are two different things.

12 CO-HEARING OFFICER DODUC: I'm . . . Perhaps
13 it's late. I'm not following.

14 Mr. Robinson, I think the question was, did
15 you know who created this chart and your answer was no;
16 right?

17 WITNESS ROBINSON: Correct.

18 MS. ANSLEY: Okay. I can move on from that.

19 CO-HEARING OFFICER DODUC: Yes.

20 MS. ANSLEY: Can we move to Page 5 of your
21 testimony --

22 (Exhibit displayed on screen.)

23 MS. ANSLEY: -- Lines 20 to 21.

24 (Exhibit displayed on screen.)

25 MS. ANSLEY: So do you see there, sir, where

1 it says that (reading):

2 ". . . State Route 160 . . . through
3 Walnut Grove has a level of service
4 threshold of 1,740 vehicles."

5 WITNESS ROBINSON: Yes.

6 MS. ANSLEY: And you understood what is meant
7 by a "level of service threshold"?

8 WITNESS ROBINSON: I assumed it's a
9 theoretical volume of traffic that could travel on a
10 road that size.

11 MS. ANSLEY: And do -- Are you aware of how
12 this level of service threshold was established?

13 WITNESS ROBINSON: No.

14 MS. ANSLEY: I believe that is all my
15 questions for you.

16 I'm -- I'm trying to move.

17 Let's see. I believe my remaining questions
18 are for Dr. Shilling.

19 Dr. Shilling, on Page 2 of your testimony, you
20 discuss the impact of roads and other linear features
21 on habitat; is that correct?

22 WITNESS SHILLING: (Searching through
23 documents.)

24 Let me get there.

25 MS. ANSLEY: And Dr. Shilling's testimony is

1 LAND-135.

2 (Exhibit displayed on screen.)

3 WITNESS SHILLING: Line 9? Yeah? Yes, I see
4 that.

5 MS. ANSLEY: And recalling your oral
6 testimony, you -- you refer to analysis done by the
7 Department of Water Resources and the FEIR; is that
8 correct?

9 WITNESS SHILLING: Several times, yes.

10 MS. ANSLEY: Did you yourself perform any
11 quantitative analysis of the impact of noise or traffic
12 on wildlife?

13 WITNESS SHILLING: Not in this area.

14 MS. ANSLEY: I do recall in your oral
15 testimony, you said you had performed a noise impact
16 study generally for the North Delta; is that correct?

17 WITNESS SHILLING: No. In --

18 MS. ANSLEY: Oh, I'm sorry.

19 WITNESS SHILLING: On the eastern edge of the
20 Delta five or six years ago on Highway 99, and then
21 other parts of California.

22 MS. ANSLEY: Okay. On Page 2 (sic), Lines 21
23 to 23, you state that (reading):

24 "The Delta tunnels . . . does not
25 consider impacts on wildlife movement and

1 disturbance by construction and operation
2 of the Project beyond the effects on
3 listed/covered species."

4 Do you see that testimony?

5 WITNESS SHILLING: Yes.

6 MS. ANSLEY: And always feel free, if you need
7 to read the sentences around it for context, to take a
8 moment. I'm not trying to . . . to stop you from
9 reading your paragraph.

10 Does your sen -- Does your phrase
11 "listed/covered species," does that include species of
12 concern or just species listed as -- under the ESA and
13 California version of the ESA?

14 WITNESS SHILLING: The Federal and State
15 ESA-listed species and species considered under the EIR
16 and included in the Department of Fish and Wildlife's
17 ITP, Incidental Take Permit, for the Project.

18 MS. ANSLEY: So is -- My question is: When
19 you made that sentence that -- that, "The Delta tunnels
20 analysis" -- for which I take it to mean you mean the
21 FEIR cited at the end of that sentence -- "did not
22 consider impacts on wildlife movement and disturbance
23 by construction and operation of the Project beyond the
24 effects on listed/covered species," did you mean to
25 include species of special concern or did you mean to

1 exclude species of special concern?

2 WITNESS SHILLING: I intended to include
3 species of concern where they're included in the
4 Incidental Take Permit and the FEIR.

5 MS. ANSLEY: Okay. So you meant that more
6 broadly than just an ESA-listed species or a California
7 ESA-listed species.

8 WITNESS SHILLING: Yes. Where -- Where they
9 would be intended to be covered by an ITP or a National
10 Communities Conservation Plan.

11 MS. ANSLEY: Okay. But you talked about the
12 Delta tunnel analysis in that section. You did not
13 limit your statement to where they would be covered by
14 an ITP.

15 Do you see that in Lines 21 to 23?

16 WITNESS SHILLING: Yes.

17 MS. ANSLEY: Is it your understanding the FEIR
18 also looked at species that were not listed species and
19 not species of special concern?

20 WITNESS SHILLING: Yes. The EIR and the
21 associated analyses did include mention of or
22 consideration of other non-listed species and habitats.

23 MS. ANSLEY: Okay. Are you familiar with the
24 Biological Opinions issued for the California Water --
25 I'm sorry?

1 CO-HEARING OFFICER DODUC: What page are
2 you --

3 MS. ANSLEY: Oh. We are still looking a
4 Page 2, Lines 21 to 23. And I'm happy to pause for a
5 minute.

6 I was moving on.

7 CO-HEARING OFFICER DODUC: Proceed.

8 MS. ANSLEY: I'm sorry.

9 Are you familiar with the Biological Opinions
10 issued for the California WaterFix by the U.S. -- or
11 the Biological Opinion issued for the California
12 WaterFix by the U.S. Fish and Wildlife Service?

13 WITNESS SHILLING: I read it last fall, and so
14 I'm familiar in that -- at that level.

15 MS. ANSLEY: Is it your understanding from
16 your review last fall that the Biological Opinion
17 addresses noise and traffic impacts on species?

18 WITNESS SHILLING: The way I would use the
19 term "address," no, because if it's not done
20 adequately, from an analytical point of view, and it's
21 not -- if the mitigations aren't enough to reduce those
22 impacts to nonsignificant, then those aren't addressed.

23 MS. ANSLEY: Okay. Well, let's try a
24 different definition of "address."

25 Is it your understanding that -- Aside from

1 your opinion on adequacy of the analysis, is it your
2 understanding that the Biological Opinion issued by the
3 U.S. Fish and Wildlife Service at least mentioned noise
4 and traffic impacts in the Biological Opinion issued?

5 WITNESS SHILLING: Yes.

6 MS. MESERVE: I have an -- a question
7 regarding: When you say "species," are you talking
8 about listed species?

9 MS. ANSLEY: When I'm talking about the
10 Biological Opinion, I see we're talking about listed
11 species, but if you'd like me to go back and clarify, I
12 can.

13 MS. MESERVE: That's fine.

14 MS. ANSLEY: Okay. On Pages 4 to 5 of your
15 testimony, you discuss noise impacts on people and
16 communities.

17 Do you see that testimony, which they should
18 be --

19 (Exhibit displayed on screen.)

20 MS. ANSLEY: -- bringing up on the screen?

21 WITNESS SHILLING: Yes.

22 CO-HEARING OFFICER DODUC: Please scroll down
23 a little bit more, Miss Gaylon.

24 (Exhibit displayed on screen.)

25 MS. ANSLEY: And my question just generally

1 is: Did you perform any independent quantitative
2 analysis of the impacts of noise on people or
3 communities?

4 WITNESS SHILLING: I did, and did not include
5 it in my direct.

6 MS. ANSLEY: Okay. Let's see.

7 On Page 4, Lines 17 to 28, you provide
8 critique of the 60-decibel threshold utilized by the
9 Department of Water Resources in its analysis of noise
10 impacts on people and communities; is that correct?

11 WITNESS SHILLING: Yes. I think it includes
12 both 50 and 60 and time of day.

13 MS. ANSLEY: That's right.

14 So we'll agree that the threshold for the day
15 is: Do not exceed 60 decibels and the -- for daytime
16 hours of 7:00 to 10:00, and the nighttime threshold is
17 50 decibels during nighttime hours of 10 p.m. to 7 a.m.

18 Is that your understanding?

19 WITNESS SHILLING: That's my understanding.

20 MS. ANSLEY: Is it your understanding that
21 impact can be a function or dependent on ambient
22 background noise levels?

23 MR. KEELING: Objection: Vague and ambiguous.

24 CO-HEARING OFFICER DODUC: Do you need more
25 clarification, Dr. Shilling?

1 WITNESS SHILLING: No.

2 It is my --

3 CO-HEARING OFFICER DODUC: Overruled.

4 WITNESS SHILLING: My understanding is that
5 the impact includes consideration of ambient in
6 comparison to ambient.

7 MS. ANSLEY: Your testimony does not discuss
8 the local noise standards in the jurisdictions in which
9 the CWF will be constructed; correct?

10 WITNESS SHILLING: No.

11 MS. ANSLEY: Is it your understanding the
12 threshold chosen by the DWR is consistent with these
13 local standards?

14 WITNESS SHILLING: My understanding from DWR's
15 explanation for the standards they use relies on a very
16 difficult-to-find non-peer-reviewed document, which is
17 actually based on thresholds for birds, and there has
18 not been examination of how people would be affected by
19 noise and setting of standards in this area or, indeed,
20 most of California.

21 So, there's not what -- what -- what I would
22 call human protective threshold used by Department of
23 Water Resources.

24 MS. ANSLEY: Can I move to strike that answer
25 as nonresponsive.

1 My question was --

2 WITNESS SHILLING: I'm happy to answer a
3 different variant of the question.

4 MS. ANSLEY: Is -- My question is: Is it your
5 understanding that the threshold chosen, which we've
6 established, is 60 decibels maximum during the day and
7 50 during the nighttime hours, is consistent with local
8 standards in the Delta?

9 CO-HEARING OFFICER DODUC: Do you know,
10 Dr. Shilling, whether that is consistent with local --

11 WITNESS SHILLING: Well --

12 CO-HEARING OFFICER DODUC: -- standards?

13 WITNESS SHILLING: So -- Sorry. But could you
14 be jurisdictionally type-specific?

15 Do you mean county, or do you mean state, or
16 do you mean the region, or do you mean the community of
17 Clarksburg?

18 MS. ANSLEY: Is it your understanding, having
19 reviewed -- Let me back up.

20 Did you review Chapter 23 of the FEIR?

21 WITNESS SHILLING: Yes, I did.

22 MS. ANSLEY: And did you review the section
23 that discusses the various noise level performance
24 standards by surrounding jurisdictions, which would
25 include things like Sacramento County, Yolo County, any

1 of the cities that would have them in the Delta --

2 PROSPECTIVE JUROR: Yes.

3 MS. ANSLEY: -- like, for example, maybe
4 Clarksburg.

5 You did review that.

6 WITNESS SHILLING: Yes.

7 MS. ANSLEY: And do you have an understanding
8 of those threshold standards?

9 WITNESS SHILLING: Do I recall the --

10 MS. ANSLEY: Yes --

11 WITNESS SHILLING: -- numbers?

12 MS. ANSLEY: -- do recall them?

13 WITNESS SHILLING: No.

14 MS. ANSLEY: So you don't recall the
15 Sacramento County noise levels performance standards.

16 WITNESS SHILLING: From something I read four
17 months ago? I don't recall the exact number, no.

18 MS. ANSLEY: This is my final question on
19 noise.

20 In your testimony regarding noise impacts, you
21 don't -- you don't discuss any specific mitigation
22 measures to reduce noise impacts included in the
23 California WaterFix Project; do you?

24 WITNESS SHILLING: I don't think so, no.

25 MS. ANSLEY: I think I'm down to my last maybe

1 two questions.

2 Turning to your testimony on sustainability,

3 which is Pages 6, 7, 8 and 9 --

4 (Exhibit displayed on screen.)

5 MS. ANSLEY: -- and a little carryover to

6 Page 10 of your testimony.

7 If you'd like to orient yourself.

8 WITNESS SHILLING: Yes.

9 MS. ANSLEY: So, up at the top of Page 6,

10 roughly Lines 7 to 12, you cite a document called the

11 Brundtland Commission report; is that correct?

12 WITNESS SHILLING: Yes.

13 MS. ANSLEY: This report was authored by the

14 World Commission on Environment and Development; is

15 that correct?

16 WITNESS SHILLING: I think so, yes.

17 MS. ANSLEY: It was issued in 1987?

18 WITNESS SHILLING: Yes.

19 MS. ANSLEY: And is it your understanding the

20 World Commission on Environment and Development is

21 associated with the United Nations?

22 WITNESS SHILLING: Yes.

23 MS. ANSLEY: Are the concepts or principles of

24 the Brundtland Commission Report requirements for

25 approval of the projects before this Board?

1 WITNESS SHILLING: I think -- I don't know the
2 answer, if they're required to follow sustainability
3 principles or not.

4 MS. ANSLEY: Specifically of the Brundtland
5 Report.

6 WITNESS SHILLING: Are you asking me to have
7 an opinion about the -- their -- the Board's
8 requirements for considering a permit for moving the
9 diversion and whether they have to consider this? I
10 don't know the answer. If you're asking something
11 else, then you can clarify.

12 MS. ANSLEY: No. I mean, I believe -- Is your
13 answer that you don't understand or you do not know if
14 the Board is required to follow the Brundtland Report?
15 Is that your answer?

16 WITNESS SHILLING: I don't know if the Board
17 is required to follow this requirement -- this
18 information.

19 MS. ANSLEY: Let's -- And this is my last
20 question.

21 Looking at Page 12 of your testimony, Lines 23
22 through 27.

23 (Exhibit displayed on screen.)

24 MS. ANSLEY: I'm just letting you have a
25 chance.

1 Do you -- Do you see that testimony, sir?

2 WITNESS SHILLING: Yes.

3 MS. ANSLEY: And on Lines -- My understanding
4 of your testimony on Lines 23 to 27 is, you're saying
5 that there will be political pressure in dry years to
6 increase the levels of diversion?

7 WITNESS SHILLING: Yes.

8 MS. ANSLEY: Is it your understanding that
9 diversions of the North Delta -- Is it your
10 understanding that diversions from the North Delta
11 intakes would be subject to regulatory constraints?

12 WITNESS SHILLING: It's my understanding that
13 regulatory constraints, when they exist, can be
14 circumvented. And that's the nature of this part of
15 the testimony that, in the event of an exceptional
16 drought, that that could occur. And the use of the
17 structure in ways that haven't been anticipated in the
18 area are a result.

19 MS. ANSLEY: Okay. I have no further
20 questions.

21 WITNESS STIRLING: Hearing Officer, may I have
22 just one moment to correct something that happened
23 during mine?

24 CO-HEARING OFFICER DODUC: Sure.

25 WITNESS STIRLING: Would you please --

1 CO-HEARING OFFICER DODUC: Of course.

2 WITNESS STIRLING: -- go to my written
3 testimony?

4 MS. ANSLEY: Here, Mr. Stirling. I have it
5 right here, LAND-205-Errata.

6 WITNESS STIRLING: Look at --

7 MS. ANSLEY: And what page are you looking at?

8 WITNESS STIRLING: Look at Page 11, beginning
9 at Line 20.

10 MS. ANSLEY: Yes, sir.

11 WITNESS STIRLING: There, I talk about
12 (reading):

13 "Nearly 4,000 acres (sic) of . . .
14 privately-owned Prime agricultural acres
15 would be permanent taken for physical
16 structures associated with the
17 construction of 40 miles of tunnel.
18 [3909 acres of locally important,
19 statewide important, prime, and unique
20 farmland would be permanently converted
21 to Project use]."

22 But on -- on -- on -- on the next page,
23 Page 12, that's where I said that (reading):

24 "[5,404 acres of locally important,
25 statewide important, prime and unique

1 farmland would be subject to temporary
2 use]."

3 I am not perfect. I could have misread that
4 where I got it. I don't have that in front of me at
5 this time, but I believe that that was correct.

6 MS. ANSLEY: I -- I think that's okay, sir.
7 You provided the reference of where you got that, so I
8 don't feel like I need to revisit that.

9 Thank you.

10 CO-HEARING OFFICER DODUC: All right. Thank
11 you, Miss Ansley.

12 Before we wrap up, Mr. Jackson, you mentioned
13 having questions for Dr. Shilling.

14 MR. JACKSON: Yes.

15 CO-HEARING OFFICER DODUC: Do you have
16 questions for the other witnesses?

17 MR. JACKSON: No, I do not.

18 CO-HEARING OFFICER DODUC: Miss Des Jardins,
19 for which witnesses do you have questions?

20 MS. DES JARDINS: Dr. Shilling.

21 CO-HEARING OFFICER DODUC: All right. So that
22 means Dr. Shilling is the only -- Unless you have
23 redirect of any other witnesses -- that's up to you --
24 but Dr. Shilling is the only one required for more
25 cross-examination tomorrow.

1 MS. DES JARDINS: Just a minute. I also have
2 some questions for Mr. Robinson.

3 CO-HEARING OFFICER DODUC: And Mr. Robinson.

4 MS. MESERVE: I will have redirect, so I'm not
5 quite sure how --

6 CO-HEARING OFFICER DODUC: That's up to you.
7 I'm just telling you who needs to be here for cross.

8 And, Miss Meserve, you overnight should take a
9 look at our March 21st, 2017, ruling in which we deny
10 your motion for reconsideration with respect to LAND-3.

11 All right. With that, we are in adjournment.
12 We will resume at 9 --

13 Oh, Mr. Ferguson. Quickly.

14 MR. FERGUSON: Yeah. I wanted to quickly
15 request that two of the panels in Group 5 switch places
16 so that the Yolo County would go before the County of
17 Sacramento panel.

18 MS. MESERVE: And I had already mentioned --

19 MR. FERGUSON: Oh, did you mention that --
20 sorry -- when I was not here.

21 MS. MESERVE: Yeah.

22 MR. FERGUSON: Thank you very much.

23 MS. MESERVE: So I think --

24 CO-HEARING OFFICER DODUC: I -- I am not
25 entertaining any more requests today.

1 Staff should have already posted what they
2 have as the latest revised order.

3 Take a look at that. We will discuss it
4 tomorrow.

5 MR. FERGUSON: Morning. Okay.

6 CO-HEARING OFFICER DODUC: Get your acts
7 together, people; okay?

8 MS. MESERVE: And then with respect to
9 tomorrow, we have the continuation of cross of this
10 panel.

11 And then we have Mr. Neudeck and Mr. Burke.
12 Would it be safe to say we will not get to the
13 Groundwater Panel tomorrow, or do you want me to have
14 them ready.

15 CO-HEARING OFFICER DODUC: It depends how much
16 redirect you have of this panel and what the
17 anticipated direct and redirect will be for the second
18 panel.

19 MS. MESERVE: Okay.

20 CO-HEARING OFFICER DODUC: What is your time
21 es -- Why don't you --

22 MS. MESERVE: Yeah. I mean, I just have a
23 couple of redirect questions so far, and it sounds like
24 we have at least another hour or so of cross-exam of
25 this panel, if I'm not mistaken?

1 CO-HEARING OFFICER DODUC: We have 35 minutes
2 by Miss Des Jardins and roughly 15 minutes by
3 Mr. Jackson.

4 MS. MESERVE: So that means 9:30, 10:30. And
5 then we have 40 minutes or so coming from the two
6 direct witnesses, so maybe --

7 CO-HEARING OFFICER DODUC: And, Miss Ansley,
8 can you Project what your cross might be for those two
9 witnesses?

10 MS. ANSLEY: I not sure.

11 I believe, for Mr. Neudeck and Mr. Burke, that
12 my cross will be . . .

13 I would -- It would be a solid hour. And
14 it --

15 CO-HEARING OFFICER DODUC: Okay.

16 MS. ANSLEY: -- may be a tiny bit longer to
17 make it shorter but I would -- If you're looking for
18 conservative estimates, I would say an hour.

19 CO-HEARING OFFICER DODUC: And does anyone
20 else here wish to conduct cross-examination of those
21 two witnesses?

22 Seeing Miss Des Jardins come up.

23 I would expect, then, Miss Meserve, we will
24 not get to your third panel -- or, actually, fourth
25 panel, as the case may be.

1 MS. MESERVE: Okay. So I shall advise the
2 Groundwater Panel that they are Thursday morning at
3 10:30.

4 CO-HEARING OFFICER DODUC: Because we are --
5 We are adjourning around the lunch break.

6 MS. MESERVE: Thank you very much.

7 CO-HEARING OFFICER DODUC: Okay. Is there
8 anything else?

9 All right. Come to Sierra tomorrow and check
10 to see if there is a post for a room change. If there
11 is, then we will be in Byron Sher.

12 If you can't find us in either Sierra or Byron
13 Sher, then I have just run away.

14 (Laughter.)

15 MS. ANSLEY: But there's no way it's, like,
16 Rancho Cordova or something like; right?

17 CO-HEARING OFFICER DODUC: I don't believe so.
18 That would --

19 MS. ANSLEY: It's here somewhere.

20 CO-HEARING OFFICER DODUC: That would be
21 cruel, yes.

22 MS. ANSLEY: Okay.

23 CO-HEARING OFFICER DODUC: Actually, I might
24 go to Rancho Cordova.

25 (Laughter.)

1 CO-HEARING OFFICER DODUC: All right. Thank
2 you everybody.

3 (Proceedings adjourned at 5:00 p.m.)

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1 State of California)
2 County of Sacramento)

3

4 I, Candace L. Yount, Certified Shorthand Reporter
5 for the State of California, County of Sacramento, do
6 hereby certify:

7 That I was present at the time of the above
8 proceedings;

9 That I took down in machine shorthand notes all
10 proceedings had and testimony given;

11 That I thereafter transcribed said shorthand notes
12 with the aid of a computer;

13 That the above and foregoing is a full, true, and
14 correct transcription of said shorthand notes, and a
15 full, true and correct transcript of all proceedings
16 had and testimony taken;

17 That I am not a party to the action or related to
18 a party or counsel;

19 That I have no financial or other interest in the
20 outcome of the action.

21

22 Dated: March 20, 2018

23

24

25

Candace L. Yount, CSR No. 2737