

SUPREME COURT OF THE UNITED STATES
NO. 141, ORIGINAL

STATE OF TEXAS,)
)
 Plaintiff,)
)
VS.) VOLUME VI
)
STATE OF NEW MEXICO)
AND STATE OF COLORADO,)
)
 Defendants.)

TRANSCRIPT OF PROCEEDINGS

The above-entitled matter came on for HEARING
before HONORABLE MICHAEL A. MELLOY, SPECIAL MASTER,
held REMOTELY via Zoom, on OCTOBER 12, 2021,
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1 **JUDGE MELLOY:** This is in the matter of
2 Original No. 141, Texas versus New Mexico and the
3 State of Colorado with United States as intervenor.
4 Let me start by asking the parties who are going to be
5 participating with today's witness to enter their
6 appearance. Who is -- who is on for Texas? I don't
7 see anybody on for Texas right now.

8 **MR. DUBOIS:** Ms. Klahn is having
9 temporary issues, Your Honor.

10 **JUDGE MELLOY:** Okay. Do we need to sign
11 off for a minute or go -- go mute and dark for a
12 minute?

13 **MR. DUBOIS:** I'm not sure. I think that
14 she is coming back online. She's having a
15 connectivity issue apparently.

16 **JUDGE MELLOY:** There she is. All right.
17 Ms. Klahn, do you want to enter your appearance?

18 **MS. KLAHN:** Yes. Sarah Klahn for the
19 State of Texas.

20 **JUDGE MELLOY:** Mr. Wechsler?

21 **MR. WECHSLER:** Good morning, Your Honor.
22 Jeff Wechsler for New Mexico. For Mr. Balliew, we'll
23 have Michael Kopp.

24 **JUDGE MELLOY:** Now, is Ms. Najjar or
25 Mr. Dubois going to be on for the United States?

1 **MR. DUBOIS:** Eventually, Your Honor,
2 both of us will be today. Ms. Najjar is going to be
3 responsible for Mr. Rios, and I'm going to be
4 responsible for Mr. Balliew, and I'm also available to
5 talk about the unfortunate situation with Mr. Cortez
6 as we -- you know, to the extent that we need to talk
7 about that this morning, and also Mr. Leininger is on,
8 who is actually the one who has spoken with
9 Mr. Cortez. I did not. So we -- we've got -- I'm not
10 sure where we're going this morning, but Mr. Leininger
11 and I are also on, as well as Ms. Najjar, who's got
12 the witness this morning.

13 **JUDGE MELLOY:** Okay. Mr. Wallace?

14 **MR. WALLACE:** Good morning, Your Honor.
15 Chad Wallace for the State of Colorado.

16 **JUDGE MELLOY:** Well, all right. Let's
17 talk for a minute about the scheduling. I guess I
18 don't -- I mean, it is what it is with Mr. Cortez.
19 It's very unfortunate, and sorry to hear about his
20 personal situation, but as I understand it, none of
21 the parties object to holding him over to the spring;
22 is that right, Mr. Wechsler?

23 **MR. WECHSLER:** Yes, that's right, Your
24 Honor. Our only caveat would be if -- if necessary,
25 we would ask that we might be able to recall another

1 witness if we have to respond to Mr. Cortez. I think
2 that's probably unlikely, but we just reserve the
3 right to ask.

4 **JUDGE MELLOY:** All right. Well, I don't
5 know. Is there anything else we need to say about
6 that?

7 **MR. DUBOIS:** The only other thing, Your
8 Honor, is that in talking with Mr. Brooks from New
9 Mexico last night and -- and then Mr. Wallace after
10 that, we also discussed the -- you know, the
11 meet-and-confer process on Mr. Cortez's exhibits, I
12 think, would have been tonight, and because he's going
13 to be pushed to the spring, we are at least just
14 wanting to inform you that we'll do the meet and
15 confer on those exhibits later.

16 **JUDGE MELLOY:** All right. That's fine.
17 So that leaves us with just Mr. Rios this morning,
18 which I assume we'll get done hopefully easily today,
19 and then Mr. Balliew some -- maybe start later today
20 and probably finish fairly early tomorrow or at least
21 midday tomorrow. Is that essentially where we are?

22 **MS. KLAHN:** My understanding is
23 Mr. Balliew will follow Mr. Rios probably by noon and
24 then -- noon Mountain time, and then I guess the
25 extent of cross will determine how long he goes into

1 tomorrow.

2 **JUDGE MELLOY:** And then -- so but once
3 we're done with Mr. Balliew, then we'll be breaking
4 until Monday? You have the experts -- we don't have
5 anybody else between now and Monday; is that right?

6 **MS. KLAHN:** Correct.

7 **JUDGE MELLOY:** Okay. All right. Then
8 let's get started. Anything else we need to talk
9 about as far as that's concerned?

10 **MR. WECHSLER:** Well, it's related to the
11 historians, Your Honor, and that is the deposition
12 designations, we did have the deposition designation
13 of -- of Mr. Kryloff, which was the U.S. historian who
14 will not be testifying live. We had designated the
15 transcript. There were no objections to the
16 transcript. There was, however, an objection to the
17 report of Mr. Kryloff, and if you recall, Ms. Barfield
18 and I had agreed that we would go back and look and
19 see if we could reach an agreement on the -- the --
20 the report, parts of the reports going in, and after
21 we took a harder look at it, we recognize that the
22 report really wasn't necessary for you to understand
23 the deposition transcript itself so we've withdrawn
24 that request. The reason I raise it now is I do think
25 it would be -- it would make sense to have that

1 submitted to you in advance of the historians and so I
2 wanted to understand that process, what you would like
3 us to do.

4 **JUDGE MELLOY:** Are you talking about
5 Kryloff's report or -- or Texas and your historians'
6 reports?

7 **MR. WECHSLER:** I'm talking, Your Honor,
8 about the deposition designation for Kryloff, which
9 has now been agreed it's prepared to be submitted. So
10 some courts will simply accept the submission as a --
11 as a pleading and review it at the appropriate time.
12 Obviously it's a bench trial. We don't expect to read
13 that into the record. Other courts that we've seen
14 will actually mark a deposition designation as a court
15 exhibit or even a party's exhibit, and so I'm
16 inquiring as to how you would like us to do that and
17 however the -- whatever the process is, we'd like to
18 have that facilitated prior to next Monday so that you
19 have the benefit of that testimony as you're listening
20 to Dr. Miltenberger and Dr. Stephens.

21 **JUDGE MELLOY:** Why don't you submit it
22 as a New Mexico exhibit and -- and if you can get it
23 on -- if you can get it to me tomorrow, that'd be
24 great.

25 **MR. WECHSLER:** We'll do that. Thank

1 you.

2 **JUDGE MELLOY:** Will there be objections
3 to any of the designations? I don't know if you're on
4 mute, Mr. Wechsler, but I'm not hearing you.

5 **MR. WECHSLER:** My apologies. Yeah, I
6 did put myself on mute. My understanding, Your Honor,
7 is that there are no objections to the deposition
8 designation now that we have withdrawn his report as
9 an exhibit to that.

10 **JUDGE MELLOY:** All right. Okay. Thank
11 you. So, yeah, if you can get that to me tomorrow,
12 I'll review it before Monday.

13 **MR. WECHSLER:** Thank you.

14 **JUDGE MELLOY:** All right. Anything else
15 before we start with Mr. Rios?

16 **MS. KLAHN:** Well, Your Honor, since
17 Mr. Wechsler raised the issue of how to introduce the
18 -- the designations for Mr. -- Dr. Kryloff, we'd also
19 had some deposition designations, I think. Would you
20 like us to follow a similar procedure at the
21 appropriate time when we'd like those to be considered
22 by the Court?

23 **JUDGE MELLOY:** Yes. Is there any reason
24 why you wouldn't want to send in early like
25 Mr. Wechsler?

1 **MS. KLAHN:** We could absolutely do that.
2 I mean, I think there's just two at the moment so
3 we'll do that. Okay. Thank you.

4 **JUDGE MELLOY:** All right. Just do the
5 same thing and mark those as Texas exhibits. All
6 right?

7 **MS. KLAHN:** All right. Thanks.

8 **JUDGE MELLOY:** Anything else? All
9 right.

10 Then, Mr. Rios, would you raise your
11 right hand, please? Do you swear or affirm that the
12 testimony you're about to give will be the truth, the
13 whole truth, and nothing but the truth?

14 **THE WITNESS:** Yes.

15 **JUDGE MELLOY:** All right. Mr. -- you
16 can put your hand down. Mr. Rios, let me ask you a
17 couple questions, preliminary questions we're asking
18 each of the witnesses. First of all, is there anyone
19 in the room with you at this -- during your testimony?

20 **THE WITNESS:** No, Your Honor.

21 **JUDGE MELLOY:** Secondly, do you have any
22 notes or other documents to which you will be
23 referring during your testimony other than the exhibit
24 book?

25 **THE WITNESS:** No, Your Honor.

1 **JUDGE MELLOY:** Then I need to advise you
2 that you're not allowed to have any communication
3 devices available to you during your testimony,
4 including iPhones, iPads, laptop computers with any
5 e-mail, texting, instant messaging capability,
6 anything of that nature. Do you understand?

7 **THE WITNESS:** Yes, Your Honor.

8 **JUDGE MELLOY:** All right. Then,
9 Ms. Klahn, you may proceed.

10 **MS. KLAHN:** Thank you.

11 ROBERT RIOS,
12 having been first duly sworn, testified as follows:

13 DIRECT EXAMINATION

14 BY MS. KLAHN:

15 **Q. Good morning, Mr. Rios.**

16 **A. Good morning.**

17 **Q. Are you an employee of the El Paso County**
18 **Water Improvement District No. 1?**

19 **A. Yes, ma'am.**

20 **Q. What's your position?**

21 **A. I am currently the water master for EP1.**

22 **Q. Okay. And how long have you been water**
23 **master for EP1?**

24 **A. When the district took over from the USBR in**
25 **October, 1980.**

1 Q. Okay. And prior to the District taking over
2 from the Bureau of Reclamation, were you employed by
3 the Bureau of Reclamation?

4 A. Yes, ma'am. I came to work for the Bureau of
5 Reclamation May the 21st, 1973.

6 Q. Okay. So that makes it about 48 years of
7 experience you have with operations at EP1?

8 A. Yes, ma'am.

9 Q. Okay. Let's talk a little bit about your
10 background. Where did you graduate high school?

11 A. From Kingsville, Texas.

12 Q. Did you attend college?

13 A. Yes.

14 Q. What did you study?

15 A. I studied -- I got an associate's degree in
16 education from El Paso Community College.

17 Q. Okay. And let's talk now about your work for
18 the Bureau of Reclamation and EP1. What did you start
19 out as for the Bureau -- sorry, what position did you
20 hold initially with the Bureau?

21 A. I came to the Bureau of Reclamation in '73,
22 and I came in from the -- from the -- straight out of
23 the service and got a job as the readjustment program
24 and I came in as what they call at that time a junior
25 ditch rider.

1 **Q. And does -- what did you do as junior ditch**
2 **rider?**

3 A. I mainly worked under more responsible ditch
4 riders, and they taught me the art of the canals, and
5 what everyday jobs the junior ditch riders would have
6 to do at that time.

7 **Q. What other jobs did you have with the Bureau**
8 **before the District took over?**

9 A. I was part time two years at dispatch, and
10 then I became a senior ditch rider. I stayed there
11 for a couple of years as a senior ditch rider, and
12 right at the -- the takeover when the Bureau was going
13 to leave the District, I got a job to continue going
14 with the Bureau as the river team with the USBR, but
15 when I went up there, then the District did not take
16 over the year they were planning to so they asked me
17 to come back, and that one year I came back the
18 general manager for -- Edd Fifer for the District
19 asked me if I would consider coming to work for the
20 District, and I accepted that position. I came back
21 as a water master.

22 **Q. Okay. Tell us what the river team did in the**
23 **Bureau of Reclamation that year that you were with**
24 **them?**

25 A. They were the very start of what was called

1 the river team. It was -- it was just a start of it
2 because the Bureau already at that time didn't really
3 have too much flows on the river. They had -- they
4 were in charge of the river, but they didn't do a lot
5 of the metering because they didn't have the manpower,
6 but this time, they established the manpower. They
7 brought in approximately about 15 men to -- to do the
8 metering and stuff and run the river at the same time,
9 manage the river.

10 Q. So prior to about 1979 or so, you're saying
11 the Bureau didn't have very many meters or measuring
12 devices on the river?

13 A. No, ma'am.

14 Q. How about within the EP1 district, were there
15 meters or measuring devices within the EP1 district
16 prior to the 1979?

17 A. I'm going to say at that time I didn't know
18 much about what the Bureau was doing on the metering
19 part of the headings.

20 Q. Okay. Fair enough. So, now, you're the
21 water master for EP1, correct?

22 A. Yes, ma'am.

23 Q. And have been for 41 years, correct?

24 A. Yes, ma'am.

25 Q. And you have some employees. How many

1 **employees report to you?**

2 A. At the present time, I got 45 employees.

3 **Q. Okay. So do you have some dispatchers that**
4 **report to you?**

5 A. Yes, ma'am.

6 **Q. And what do the dispatchers do?**

7 A. I -- I presently have three, and they're
8 broken into shifts. They come in at 5:00 in the
9 morning to 1:00 and then from 1:00 to 9:00, and their
10 job is to -- to -- to accept calls from the farmers,
11 either by telephone, e-mail, or text -- I mean, not
12 text but e-mail and fax, excuse me, to take the order,
13 and then we're so far away from the dam, we're three
14 days away from the dam, so the dispatcher, when they
15 generate the ticket for the water order, they have to
16 be real careful in how they take the order because if
17 a farmer calls in today, he's going to have to
18 schedule the farmer three days from now to pick up the
19 water. So they generate the ticket and then they give
20 out the ticket to the ditch riders, and then at the
21 same time, they're taking a control -- when the
22 irrigation starts, the ditch rider reports it to ditch
23 -- to dispatcher. The dispatcher writes it down, and
24 then when the irrigation completed, they mark them
25 off, and that shows the ticket is completed at that

1 time.

2 Q. Okay. So the dispatcher works closely with
3 the ditch rider to make sure that the water that's
4 ordered gets delivered?

5 A. Yes, ma'am.

6 Q. And then when that order is made, when the --
7 sorry, when the delivery is made, the ticket goes to
8 somebody in water records; is that right?

9 A. Yes. From there, they go to water records
10 and she gets all the tickets, checks them out to make
11 sure there's no discrepancies. If there's something
12 that chief feels that something is wrong with the
13 charge or the -- anything, she either goes to the
14 ditch rider or she goes to the -- to the operations
15 supervisor on duty.

16 Q. Okay. And operations supervisor would be you
17 or one of your assistant water masters; is that right?

18 A. Yes, ma'am.

19 Q. Okay. Do you also have a river team working
20 for you?

21 A. Yes. We made our own river team, and right
22 now presently, we got -- we got four of the river
23 team, and then we got one supervisor that oversees the
24 river team to make sure everything is running
25 properly.

1 **Q. And what does your river team do?**

2 A. The river team is the ones that go out every
3 morning gather data and meter -- for instance, all our
4 major headings, like the Franklin, Riverside is one of
5 the major headings, we try to meter them every day to
6 make sure that the shift on those particular canals
7 are being kept accurate and then we got some more
8 ditch riders, some more teams that are also doing
9 metering and -- which is 6A/6B, and then we've got
10 some that goes farther up to Mesilla Dam, Caballo, to
11 make sure everything good. We also got telemetry all
12 the way up to Caballo and to check the telemetry is
13 working properly and to verify that everything is okay
14 working, batteries and everything, solar panels if
15 they're kept clean, and stuff like that.

16 **Q. Okay. And I want to ask you one more**
17 **question about the water records. You use the term**
18 **charge that the water records person, Cathey, she**
19 **makes sure that the charges are recorded. What do you**
20 **mean by a charge when you use it in that way?**

21 A. Every time a farmer irrigates with the ons
22 and offs, a charge is accumulated. In other words,
23 the farmer uses X amount of water, and she has the
24 running data on all the farmers that once they charge
25 X amount of acre-feet, it goes to the head banker. We

1 always call it like a bank account. His budget
2 allotment and then it's subtracted and then it shows
3 how much he used, how much he got left, and we try to
4 send out these statements once a month to the farmer
5 to make sure that he knows where he's using with the
6 irrigation that he's been watering.

7 Q. And the -- but it's more than once a month
8 that you actually take a look at those charge sheets,
9 isn't it?

10 A. Yeah. Especially Cathey. She keeps an eye
11 on them nearly every day.

12 Q. Okay. So let's talk about -- if I could have
13 Blair Demo 13 put up. So, Mr. Rios, do you recognize
14 this exhibit?

15 A. Yes, ma'am.

16 Q. What is it?

17 A. It's an order form that I use, EBID, and the
18 Bureau of Reclamation use to order water.

19 JUDGE MELLOY: Ms. Klahn, let me
20 interrupt you just for a second there. I failed to
21 admit the exhibits, which I should have done at the
22 beginning of Mr. Rios' testimony. This exhibit is
23 identified as an A exhibit, and I think it may already
24 be in, but it's not. It's admitted. Rios Deposition
25 -- Demo Exhibit A is an A and is in evidence. There's

1 no number -- number on that one.

2 **MS. KLAHN:** Which one?

3 **JUDGE MELLOY:** Texas Demo Rios. It
4 doesn't have a number. Should it be 01?

5 **MR. WECHSLER:** Your Honor, I understood
6 this to be Blair Demo 13.

7 **JUDGE MELLOY:** I'm just looking at the
8 list here. There's also a -- but on the list of New
9 Mexico's objection to Rios direct testimony, there is
10 a Texas Demo Rios with no number, which is indicated
11 as an A exhibit, which I think is --

12 **MR. WECHSLER:** I think the other two
13 exhibits are a map and the hydrograph that we looked
14 at with Dr. Blair yesterday.

15 **JUDGE MELLOY:** I think there's also --

16 **MS. KLAHN:** Yeah, I think everything
17 else is already in evidence. There's Blair Demo 3,
18 which is the organizational chart. There's Reyes Demo
19 4, which is a map, and then Blair -- yeah, Blair Demo
20 15, which was the hydrograph, and Demo 13, which we're
21 looking at now. I gather, although I haven't had a
22 chance to ask anybody this, I gather that for some
23 reason, some of the Excel spreadsheets may have gotten
24 the numbers cut off or something, so that might be why
25 it doesn't show on there, Your Honor. I think we

1 might have had a little technical difficulty
2 internally just from some e-mails I saw this morning.

3 JUDGE MELLOY: Well --

4 MS. KLAHN: Oops. You're on mute, Your
5 Honor. Your Honor, I think you're on mute.

6 JUDGE MELLOY: This is Blair 13, which I
7 believe is in evidence, right?

8 MS. KLAHN: Correct.

9 JUDGE MELLOY: Okay.

10 MS. KLAHN: Yeah.

11 JUDGE MELLOY: All right. So in case I
12 didn't -- in case I was muted, the -- what I said was
13 we'll take -- the sheet seems a little bit confusing
14 so let's just take the exhibits as they're used and --

15 MS. KLAHN: That's fine.

16 JUDGE MELLOY: -- we'll see if they're
17 in evidence. If not, we'll take them up as they come.
18 All right.

19 MS. KLAHN: That's fine.

20 JUDGE MELLOY: You can go ahead.

21 Q. (BY MS. KLAHN) Okay. Mr. Rios, we're back.
22 So here's the order form. Can you tell us how you --
23 are you the person that fills out this order form?

24 A. Yes, ma'am.

25 Q. Do you have some help from the water master

1 at EBID?

2 A. Yes, ma'am.

3 Q. Tell me how you derive the numbers that
4 you're putting in for EP1. Do you have a meeting with
5 your ditch riders?

6 A. Yes, ma'am. We -- we -- the two main days
7 we're trying to order water is on Tuesdays and
8 Fridays. We order Tuesdays for Friday, Saturday,
9 Sunday, and we order Fridays for Monday, Tuesday, and
10 Wednesday. So any time after 8:00 on Tuesday, the
11 gentleman tries to come in here and tries to order for
12 Friday, and the order has gone in. The dispatcher
13 automatically gives them a due date of Monday, but yet
14 this is the way it starts. The first thing I do in
15 the morning on Tuesday, I go talk to my senior ditch
16 riders. The Franklin Canal, will have to see ditch
17 riders, and I talk to them by showing the acres they
18 got, the deliveries they got, and any other irrigation
19 that might still be irrigated during the period of
20 time, and they give me an order, and then they go to
21 -- I ask them to give me a detail how they use the
22 water to make sure we use it as efficient as possible
23 and then from there, I go to the Riverside, and then
24 there's four senior ditch riders there. They give me
25 the numbers there, and we do the same thing. We go

1 through detail, and then from there, I go to -- to
2 what I call the 6B and the 6 -- and the 4B, which is
3 up in the upper valley, and that was a little bit more
4 technical because not only am I ordering water for
5 Texas, but I'm ordering water for New Mexico on this
6 process. And here's where James kind of gives me a
7 little leeway. I get -- I get to talk to his
8 assistant water master that runs that area because we
9 have to sit down and discuss the time that we're going
10 to -- I'm going to get the water when he says he can
11 deliver it to me, especially along the east and west.
12 It's not a set date. Normally when I'm ordering
13 Tuesday, can you get it to me Friday, and he said,
14 Robert, I can't get it to you until Sunday, which I
15 understand he's got priorities, and it's great. So I
16 can line up my farmers and tell them, you know what,
17 we can't get to you Sunday. Once I get that done, he
18 also goes back and reports to James, then once that's
19 done, then I call James and then we start talking
20 about what's considered the upper valley, and then
21 when James and Mike sit down, he starts getting me a
22 rundown of the Arrey, the Leasburg, the California,
23 the Eastside, the Westside, and the Bypass.

24 Q. Okay.

25 A. Once we get all those numbers down together,

1 we work out a total order and then we discuss the
2 river.

3 Q. Okay. Let's stop there. What about Mexico?

4 A. Mexico is -- they always got an order, but
5 Mexico from the very beginning of the season when they
6 give them their allocation, they're able to calibrate
7 their -- their water usage and how they want to use
8 it, and they pretty well set up an irrigation schedule
9 for the whole season unless they're allocated more
10 water during the year where they change it. But once
11 they get their allocation from the Bureau, they pretty
12 well set up the schedule and then the boundary will
13 send me their numbers and they pretty well know how to
14 order their water. We set the numbers automatically.

15 Q. Okay. Now, just to make sure it's clear from
16 the record, you started out by talking about working
17 with your ditch riders on the Franklin Canal and the
18 Riverside Canal and the entries for those on this
19 order form are in the lower left; is that right?

20 A. Right.

21 Q. And then you talked about La Union West and
22 East and the Three Saints, and that's the 6A/6B area;
23 is that right?

24 A. Yes, ma'am.

25 Q. Okay. Then you moved onto talking with James

1 about the upper valley, correct?

2 A. Right.

3 Q. Okay. And you were just about to tell us
4 about the river, so how do you -- after you and James
5 have met, what are you looking at in terms of the
6 behavior of the river to figure out what to do?

7 A. The particular water was done, like, five
8 days after the first release so the river at this time
9 is still misbehaving. It's not showing what we want
10 it to show. We're putting a lot of boost in there
11 because we don't know what it's going to take to get
12 the water to El Paso yet.

13 Q. Can I stop you and just ask you what you mean
14 by the river misbehaving?

15 A. I want to call it misbehaving because we
16 don't -- it's such early in the game, it's -- right
17 now, we're releasing it. We're releasing almost 2,500
18 feet, and we know we need so much in El Paso, but we
19 don't know what it's going to take to get that water
20 to us, so in the past couple of years between Al --
21 Dr. Al Blair and Dr. King and ourselves, we found out
22 that a very comfortable number to start off the first
23 release is around 2,500 feet, and we know as the days
24 go by how to cut it back because the drop will catch
25 up with the release a lot faster than the release at

1 the first time because on the first release, it takes
2 so long to get the water to El Paso.

3 Q. And where's the water going if it's not going
4 directly to El Paso?

5 A. It's -- the river -- it's seeping back into
6 the Rio Grande.

7 Q. Okay. So you started to talk about the river
8 boost here. So at this point, you're five days in so
9 you say, did you start this year in 2021? Did you
10 start with 2,500 CFS river boost?

11 A. Yes, ma'am.

12 Q. Okay. So, now, what led you to 961 on June
13 5th? Do you recall?

14 A. The 961, Sarah, it was done after all the
15 numbers that were figured out what we needed, what
16 James needed on his order, what I needed on my order,
17 and then whatever was left over, that's what we used
18 at the boost to keep the -- the numbers as steady as
19 possible.

20 Q. Okay. And you just referred to a
21 conversation that you had -- conversations you had
22 with Dr. Blair, Dr. King, James Navares, the EBID
23 water master, and yourself. Do you have those every
24 day at the beginning of the season?

25 A. Let me back up. After me and James talk

1 about this order and we try to work it out as much as
2 possible because once we get this done and then at the
3 beginning of season, anywhere from 30 days, we will
4 sit down with Dr. King and Dr. Al Blair to discuss the
5 water order and they oversee the operations for about
6 the first 30 days. They're sometimes pretty hard on
7 us, and the general managers are also listening in
8 because we're trying to conserve as much water coming
9 in at the same time. So one thing the engineers do
10 not let us do on our own, me and James, they don't let
11 us go up, but they let us go down on the release. So
12 after we get -- me and James talk, we go to Al and
13 King and take another 30 minutes to discuss it. Once
14 everybody is in agreement in the order and they give
15 us the okay, then from there, we're ready to send it
16 off to the Bureau of Reclamation.

17 Q. So I'm looking at the lower right side of
18 this exhibit, and I see East Gate and West Gate. Is
19 that the gate settings that you want the -- that you
20 want the Bureau to set the gates at for the release
21 you've requested?

22 A. Yes, ma'am.

23 Q. Do you actually tell them what gate settings
24 you want? You kind of know?

25 A. Yes.

1 **Q. Okay. And does the Bureau then -- what does**
2 **the Bureau do when they get the order?**

3 A. We text it off to Larry from the USBR.
4 That's their contact. From there, Larry sends it off
5 in another text to about -- I want to say about 15
6 different individuals that it goes off to, and those
7 15, they're everywhere from the Elephant Butte and
8 goes all the way to Albuquerque, but everybody is
9 aware of our release that we've done. And then we get
10 the okay back in the text says the release is done 15
11 minutes later and everything is a go.

12 **Q. Okay. Now, when you're preparing this order**
13 **form to submit to Reclamation, what is your goal in**
14 **terms of the amount of water that you're bringing**
15 **down?**

16 A. The number one goal no matter what these
17 numbers look like, they look kind of crazy sometimes,
18 is -- the number one goal is we try not to spill
19 whatever, because I see it this way and James sees it
20 the same way, that any spill on -- whether it comes
21 out my -- my tail end, it affects both of us in a way
22 so we generate the order to make sure we try not to
23 spill.

24 **Q. Does that mean you sometimes don't order as**
25 **much water as you like?**

1 A. I normally will try to keep the order a
2 little bit on the low side to make sure that I can
3 account for any kind of little extra boost, any little
4 extra water that comes down the Rio Grande.

5 **Q. Okay. And yesterday we had testimony that**
6 **this order form has been used since the implementation**
7 **of the 2008 Operating Agreement, and you were working**
8 **for EP1 before 2008. How did you order water before**
9 **you had this order form?**

10 A. Before this order form, we would just take
11 the numbers that we had here, and we hand them over to
12 USBR. James would do the same thing, give it to USBR.
13 They would put the numbers together, and they would
14 decide what to release.

15 **Q. And did you get your water when the Bureau**
16 **was doing that?**

17 A. A lot of times, we wouldn't get our water.
18 We would be short.

19 **Q. Do you know why?**

20 A. From working with them a little bit when I
21 was out there with the river team, I saw how they kind
22 of figured out the releases. They would look at the
23 weather and say, well, maybe it's going to rain so we
24 wouldn't have to release. The way they calibrated
25 their release on their Caballo gates was they would

1 take old meter notes and they would say, okay, we need
2 2,500 feet released. This was the last time we
3 metered at Caballo was 2,500 feet. We would release,
4 you know, 5.80 -- I mean, 5 point -- they would set up
5 the gates. A lot of times, they were off.

6 Q. Okay. So previously, you guys -- you folks
7 weren't authorized to tell them what gate height to
8 set it at, right?

9 A. No. We had no say-so in the boost, but in
10 those early years, it was not a boost. The river had
11 300 feet of accretion in it, so you had to play with
12 accretion. The river is always playing with you.

13 Q. Accretions. Another word for that would be
14 gains?

15 A. Gains, yes.

16 Q. Okay. So you -- you talked a little bit
17 about your river team and the water measuring that you
18 do. Let's -- let's talk a little bit about where
19 those meters and telemetry are in the district. Do
20 you have meters and telemetry -- meters or telemetry
21 on all the main canal headings?

22 A. Yes, ma'am.

23 Q. And how about the laterals?

24 A. We have them on those, too.

25 Q. Okay. And does the farmer turnout have a

1 **measuring device?**

2 A. No. The farmers turnout did not have it, but
3 a lot of it started to use telemetry on our main -- on
4 our laterals that don't have turnouts so they monitor
5 their water that way.

6 **Q. So how do you know how much water to deliver**
7 **to a turnout if it's not measured?**

8 A. Because every turnout in the valley that we
9 have is set up what they call an average CFS, and the
10 average CFS turnout could be anywhere from 2, 3 CFS up
11 to 15, 20, 25 CFS. They all got to carry a different
12 average.

13 **Q. Okay. And the average CFS, was that**
14 **something that you were involved in establishing for**
15 **the turnouts?**

16 A. Yes, ma'am. It was -- it was established.
17 1980, we had a lot of disgruntled farmers on how we
18 did the charging, so we decided at that time to start
19 metering the farmers and started charging them so we
20 started metering them, and they were not ready for the
21 metering, and they were starting to get high charges
22 and then some were getting low charges, but that's how
23 it worked out. So after a while, we took four years
24 of meter readings and we took out the high and low for
25 every year, we averaged the amount, and then we

1 averaged the amount for the four years that we metered
2 them. We took an average CFS, and we let the farmers
3 know this was going to be the average CFS, and they
4 did not like it, they had the right to protest it. We
5 would go back out there and meter them again for
6 another years and establish them another CFS if they
7 didn't like it.

8 Q. Okay. So let's go back to what you first
9 said. When you -- when EP1 took over, there was a lot
10 of disgruntled farmers who didn't agree with or like
11 the charges for water usage. How was the Bureau
12 charging water? Did the Bureau measure water at the
13 turnouts?

14 A. No, ma'am.

15 Q. How did they charge the water then?

16 A. They just charged them on a percentage that
17 they set up, and it was set up for many, many years.
18 When I was here, the -- they were there for many
19 years, and the ditch riders make the charges and they
20 would just basically, a farmer would irrigate a
21 hundred acres and they were taking 75 hours and
22 another farmer could irrigate a hundred in 25 hours,
23 they would both get -- they would charge 30 percent so
24 most of them are going to get charged 30 acre-feet,
25 and that was it.

1 Q. Okay. So the people that were -- the folks
2 that were irrigating for less time were getting
3 charged the same as the people irrigating for more
4 time, but the people irrigating for more time were
5 getting more water? Is that why they were
6 disgruntled?

7 A. Right. Yes, ma'am.

8 Q. Okay. So -- so, now, you have a turnout
9 average CFS system, and you can measure the deliveries
10 to the turnouts; is that right?

11 A. Right.

12 Q. Okay. And you have a system to challenge --
13 for farmers to challenge the charges if they don't
14 like them?

15 A. Yes. And then Cathey, the accountant, would
16 also see a charge to where the charges started to go
17 very low or very high, so she puts out irrigation
18 needs to be metered and read so next time -- every
19 time they water, the river team sees that, and we try
20 to start metering them a couple of times to maybe
21 reestablish their CFS on their turnout.

22 Q. Okay. Do you feel like your charges are
23 pretty accurate now?

24 A. Yes, ma'am.

25 Q. By the same token, would you think charges

1 from the time when the Bureau was running the Project
2 would have not have been accurate?

3 A. I would say they were not accurate.

4 Q. Let's talk about the drains in EP1.

5 MS. KLAHN: Could I have Reyes Demo 4
6 put up, please?

7 Q. (BY MS. KLAHN) Okay. Mr. Rios, were you able
8 to watch the testimony yesterday of Dr. Blair and
9 Mr. Reyes?

10 A. Yes, ma'am.

11 Q. So you heard the testimony about drains that
12 both gentlemen gave?

13 A. Yes.

14 Q. Okay. So I don't want to rehash -- I don't
15 want to re-plow that ground, but let's just orient
16 ourselves here. What I really want to talk about is
17 that place down at the end of the district that's in
18 the inset in the upper right corner of the map, and
19 the one focus I want is to understand sort of where
20 those drains go. So let's start with that. The river
21 drain and the Mesa drain and the Fabens waste drain
22 all seem to come together there. Can you describe
23 what that relationship is?

24 A. The Mesa drain pretty well starts way on top
25 of the -- the unit, way what they call 7B area, and

1 the Mesa is a long drain. But it eventually works its
2 way through 7A, 8A, and it works its way all the way to
3 Fabens, and if you see it right there, the Mesa drain
4 will run under the Riverside Canal, and also will go
5 under the river drain and then it makes a circle and
6 that little land in between the two drains, you see
7 it, that's what we call, also, the Fabens yard. So
8 our Fabens yard there is almost like an island. But
9 the Mesa drain will circle around and -- and join with
10 the river drain.

11 Q. Okay. So about at the top of the F in Fabens
12 waste drain is where the two drains join?

13 A. Yes.

14 Q. Okay. And then if you follow the Fabens
15 waste drain down, which it seems to join with the
16 Fabens waste channel; is that right?

17 A. Right.

18 Q. So where is the waste point at the end of the
19 EP1 system? In other words, where would the waste
20 water -- if there was waste water coming out of the
21 system, returns or something, what -- what structure
22 would it be coming out of into --

23 A. It would be coming out right there when --
24 the end of the Riverside, the beginning of the Rio
25 canal, what is called the Fabens waste channel, there

1 would be a spill there, right there. That would be
2 one of our places we would waste. That's the reason
3 back in the Bureau days they put in a Fabens waste
4 drain and a Fabens waste channel.

5 **Q. Why?**

6 A. That way because if the drain is coming down
7 and it's only recording 10 CFS and at the Fabens waste
8 channel, records 30, in other words what we're seeing
9 there is 20 feet of that water at the Fabens waste
10 channel is probably coming from EP1.

11 **Q. Okay. And where's the 10 CFS coming from?**

12 A. It's coming from the drains.

13 **Q. Okay. I see. Okay. And then there's an**
14 **arroyo, also, that comes into the river drain, it**
15 **looks like. Does that arroyo ever confuse**
16 **measurements in terms of -- or confuse sources in**
17 **terms of what's coming out the end of the Fabens waste**
18 **channel?**

19 A. It -- it can, Sarah. It can confuse you, but
20 that's the reason, also, the recorder at the Fabens
21 waste drain was put in, to pick up any extra water
22 that was picked up before the waste channel to
23 distinguish the difference between two waters. The
24 Fabens waste channel at that time records. It'll pick
25 up 50 feet, and the Fabens waste channel will pick up

1 50 feet. It means that water is coming from the drain
2 itself, probably telling you the San Felipe arroyo ran
3 for a couple of hours.

4 Q. And how would you know if it wasn't arroyo
5 water? What would the measurements be?

6 A. The basic flows. We have -- we have
7 telemetry on both sides, also. You can see it
8 constantly telling you what's going on.

9 Q. Okay. So if there's just water in the Fabens
10 waste channel and not in the Fabens waste drain,
11 that's how you'd know that it wasn't arroyo flow?

12 A. Right.

13 Q. Okay. Now, in your time with the Bureau of
14 Reclamation, were you aware of or involved with a
15 project called drain to canal?

16 A. Yes, ma'am.

17 Q. And what is drain to canal? Can you describe
18 that for the Court, please?

19 A. When I came to work in -- for the district in
20 1973, that structure was already in place. At that
21 time it still looked like a -- not a new station but a
22 fairly new station, so what they would do there is
23 they --

24 Q. Which -- I'm sorry. Which structure were you
25 talking about? I'm sorry. Just to be clear.

1 A. They put a structure right there at the river
2 drain --

3 **Q. Okay.**

4 A. -- right there where it went under. They put
5 a structure in there of two gates.

6 **Q. Okay.**

7 A. And they use that to build up the water on
8 the river drain because the river drain is a lot lower
9 than the Riverside Canal. So they got those gates.
10 They would build up the water and then -- then they
11 had a gate on the Riverside Canal that would open and
12 they would cause the water from the drain to go into
13 the Riverside drain.

14 **Q. To go into the Riverside Canal?**

15 A. Riverside Canal. Sorry.

16 **Q. So the Bureau's idea was to try to use water**
17 **in the river drain to increase the supply in the**
18 **Riverside Canal?**

19 A. Yes.

20 **Q. How did that work?**

21 A. Turned out to be a big flop. In other words,
22 it created a lot of headache for the farmers.

23 **Q. How so?**

24 A. What it started doing when we'd build up the
25 water in the drain and the water had to be almost to

1 the top to the point that it was even coming out of
2 the drain in some spots. By doing that after about a
3 week of time of building that up -- building it up,
4 the water in the farmers' fields started coming up.
5 In other words, the people that had cotton no longer
6 could go in there and work on their fields because
7 their water in their fields was constantly had over 6
8 inches of water, and all the pecan fields had 6 inches
9 of water on them and, of course, you know, you don't
10 want this thing happening to your field being full of
11 water, and especially what they thought was -- what
12 they knew was drain water that was backing it up.

13 **Q. Okay. So during your time at the Bureau,**
14 **that project was operated once but never again?**

15 A. It was operated a couple of times. The first
16 couple of times they tried it, I remember nothing
17 happened, but during -- after a couple of times of
18 them checking it up, they started having the problem.
19 They tried it a couple of more times, Sarah, by
20 building it up, but, now, after that, every time they
21 build it up, it would cause problems in the fields,
22 but not only that, but the farmers in the Tornillo
23 Canal did not like that water either.

24 **Q. Why not?**

25 A. It was too hard of a water. The TDS on those

1 drains would run over 2,000 to 3,000 TDS, and they
2 said why should we receive this water when we should
3 be receiving allotment water, and they did not want
4 it.

5 Q. Okay. Okay. Let's shift gears. Let's talk
6 about the district's wells. We've heard a lot of
7 testimony in the last couple days about the district's
8 -- or the last day or so about the district's wells.
9 Under what conditions do you as the water master
10 decide to use the wells?

11 A. Don't use them much because, again, the
12 farmers don't like them because they're very salty,
13 the TDS, so we mainly use them to help us out when
14 we're short on the water on the Rio Grande.

15 Q. And yesterday, there was some testimony
16 during cross-examination that seemed to suggest that
17 the TDS associated with the wells in the lower valley
18 was a thousand CFS. What's -- what's your experience
19 with the TDS in the wells in the lower valley?

20 A. Okay. Can you say that again?

21 Q. What's your understanding of the TDS in the
22 wells in the lower valley?

23 A. That they're very high.

24 Q. Do you know any numbers?

25 A. I know that we got three that we call them

1 salty dogs, because when we say salty dogs, they're
2 over 3,000 TDS. The farmers know all our wells. They
3 know which are good and which ones are bad so -- but
4 they all run, Sarah -- they're all running about 2,000
5 TDS on them. We do not have any in the thousand.
6 Wish we did, but they're not.

7 **Q. Okay. So you say you try not to use them.**
8 **Let's talk about 2021. Did you use the wells in 2021?**

9 A. We did use them for -- we didn't use them in
10 June, but we used them in July.

11 **Q. How did you -- can you describe the water**
12 **delivery circumstances under which you decided to use**
13 **them?**

14 A. Again, when -- when the river -- we leave it
15 alone. Me and James got it under control. It starts
16 behaving pretty well. But then right in the beginning
17 of July when James cut off on us, the -- because he's
18 cutting off his headings. He's not building up water
19 in the Arrey no more. He's not building up water in
20 the Leasburg area no more, so the river starts doing
21 crazy things to you by start maybe giving you water
22 back so -- and then it rained on us and so when it
23 starts raining on us, it will -- I'm three days away
24 from the release to bring the water down so we start
25 making cuts, cuts, cuts, and I cut it down to 300

1 feet. And I know when we cut it down to 300, we're
2 going to be in trouble. Well, after a couple of days,
3 it happened around July the 4th, it started getting
4 hot on us again so here I am trying to bring the river
5 back up. It's from 300, trying to bring it up to at
6 least 600, but you can't -- you can't overreact and
7 says the 300 goes fast so you try to do it in steps of
8 150, because you don't want to create a massive wave
9 on the river either and get it down here. So we did
10 150 and waited three days and it didn't show up. So
11 we did another 150 and mainly -- out of the 150,
12 you're lucky if you got 75, but it wasn't coming in.
13 So I was starting to run through problems so that's
14 where I go to Mr. Reyes and says, Chuy, I'm already
15 seven days behind my deliveries, I need to do
16 something fast. Says what do you mean? I need some
17 wells, and I need them, like, yesterday. Says, well,
18 fire up what we need. We fire them up in sequences.
19 The most that we like to fire up is 20, 25. Any more
20 than that, it starts affecting the TDS too bad to
21 where it starts building it up, up to about 15 to
22 2,000. So we know what we can do with the wells so we
23 fired up about 20, 25 for a couple of days, then we
24 started -- everything started getting back to normal,
25 then it rains on us again, we shut off. Five days

1 later, here it comes the river again, to bring it
2 under control, and finally we fired up the wells
3 again, got the river under control, and we sent them
4 off then we were due for them for the rest of the
5 year.

6 **Q. Now, there was some testimony yesterday about**
7 **metering of those wells. Were the wells metered this**
8 **year?**

9 A. I want to say right at the end, Sarah, yes,
10 but not at the very beginning.

11 **Q. So do you have meter measurements from the**
12 **water -- the groundwater that you use this year?**

13 A. The main supervisor, the one that runs the
14 wells, we were able to get a grant and able to put
15 meters on all the wells. Talked to him Monday, he
16 said he still had about five more to go, but after
17 this, all the meters -- all the wells will have
18 meters, and they -- they should have them a little bit
19 more because these meters that I hear were put in,
20 we'll be able to put them into our telemetry to show
21 us when they're running. Instead of going out to
22 check them to see if they're running, you'll be able
23 to see them on telemetry when they're producing, also.

24 **Q. Okay. And what I was really getting at was**
25 **whether or not you had any measurements, any volumes**

1 of water that you pumped this summer from the wells?

2 A. No.

3 Q. Okay.

4 A. No. They just got -- they're just now
5 putting them in, Sarah. Sorry.

6 Q. Okay. So what about other years in which
7 you've used the wells; do you remember any other years
8 in which you've used the wells?

9 A. For some reason, I remember the 2003, but the
10 other years offhand, I couldn't tell you.

11 Q. Okay. Do you use the wells? Do you have to
12 use the wells every year?

13 A. If I do, Sarah, it'd be maybe 10, 15 days.
14 When I get in trouble with the river.

15 Q. Okay. All right. Let's talk a little bit
16 about the City of El Paso effluent. Do you -- there's
17 effluent discharged into the district's canals from
18 the City of El Paso; is that right?

19 A. Yes, ma'am.

20 Q. And are you aware of the volumes of effluent
21 that are present in the canal every day?

22 A. Yes, ma'am.

23 Q. Are they the same all the time?

24 A. No.

25 Q. How do you deal with the presence of that

1 **effluent when you're trying to make your water orders?**

2 A. I don't use it as part of my water orders,
3 because it's not something I could use that's going to
4 be constant so it's more -- I hate to say the words
5 more in a way, I think to me it's because of the way
6 it comes in. It goes from -- two plants will go from
7 20 to -- sometimes they go 60, sometimes they go 80,
8 and if anybody that runs water will understand, we're
9 just -- try to imagine having 20 feet in the canal one
10 minute for five hours and then have 60. It's very
11 hard to manage. So you've got a roller coaster or a
12 seesaw going up and down.

13 **Q. It becomes a space issue as far as having**
14 **space in the canal?**

15 A. Yes. You have to be real careful because
16 this water, if you're not careful with it, it'll get
17 away from you.

18 **Q. Could you use the effluent as a primary**
19 **supply of water for the farmers?**

20 A. No.

21 **Q. Okay. Let's turn to the last topic, which is**
22 **the Operating Agreement. Are you familiar with the**
23 **2008 Operating Agreement?**

24 A. Yes, ma'am.

25 **Q. Could you describe for the Court how your job**

1 has changed since the 2008 Operating Agreement was put
2 into place?

3 A. The 2008 Operating Agreement, in a sense, to
4 me is giving me more work, but it -- it's more of a
5 challenge because, now, between the two districts, and
6 I'm going to say James and myself, we call the shots,
7 and the only -- the best thing about it is if I call
8 the shots and we're short, I've got nobody to blame
9 but myself. But sometimes that's better than having
10 somebody else call the shots for you and being short.
11 So, now, if I'm short, I'm short, but I've got nobody
12 to blame but myself, so -- and that's where the
13 communication now with James and EBID helps a lot. So
14 to me, I like it better.

15 Q. Okay. I want to go back to one topic and
16 just clarify a question that we talked about that
17 related to the drain to canal. I asked you if the
18 drain-to-canal project had not operated since you were
19 with the Bureau of Reclamation. Do you recall that I
20 asked you that?

21 A. Yes. Like I said, it only worked in the
22 early -- I came in '73, and I remember by the middle
23 '70s, it was no longer being used.

24 Q. And it was because it didn't work?

25 A. Because it didn't work. In those days, too,

1 there's a lot of water in the drains. Today, there's
2 hardly any water in the drains to even make the
3 effort. You will never build up 10 CFS in that drain.

4 **MS. KLAHN:** Okay. That's all the
5 questions I have at this time. Thank you, Mr. Rios.

6 **THE WITNESS:** Thank you.

7 **JUDGE MELLOY:** Ms. Najjar, do you have
8 any questions?

9 **MS. NAJJAR:** No questions, Your Honor.

10 **JUDGE MELLOY:** All right. Then,
11 Mr. Wechsler, you may proceed.

12 **MR. WECHSLER:** Thank you.

13 **CROSS-EXAMINATION**

14 **BY MR. WECHSLER:**

15 **Q.** Good morning, Mr. Rios. How are you?

16 **A.** Doing good.

17 **Q.** Good. Nice to see you again. We heard a lot
18 from Mr. Reyes yesterday about the district so I'm
19 just going to ask you some questions to fill in the
20 gap. We'll start with ordering water from
21 Reclamation. So during the irrigation season, as you
22 just testified, you coordinate with EBID on making
23 orders from Reclamation; is that right?

24 **A.** Yes, sir.

25 **Q.** It's common for you to talk with someone from

1 EBID, one of the water masters, two or three times a
2 day?

3 A. Yes.

4 Q. And together, you determine the amount of
5 water to release from Caballo?

6 A. Yes.

7 Q. And in direct exam, you -- examination, you
8 referred to something called the spill. You said that
9 you were trying to avoid a spill. Do you recall
10 saying that?

11 A. Yes, sir.

12 Q. How do you define "spill"?

13 A. Anything that works its way to the tail end,
14 which is the tail end of the Tornillo Canal.

15 Q. In other words, you're trying to avoid waste
16 going out of the bottom of the Project?

17 A. Yes, sir.

18 Q. And you said that that would affect both you
19 and EBID. Do you recall saying that?

20 A. Yes.

21 Q. Why would that affect EBID?

22 A. Because it's the delivery factor of the Rio
23 Grande. If I'm using extra water and I'm using it
24 wisely, the -- the delivery factor on the Rio Grande
25 goes down, and most of us lose water because we're

1 using more water to deliver to ourselves, and what
2 we're trying to do is deliver -- deliver our water
3 most efficiently as possible, to not take the releases
4 the best as possible. It only gives both our
5 districts better water.

6 Q. Then if more water goes out the bottom,
7 there's less for everybody in project storage; is that
8 right?

9 A. Pretty well.

10 Q. Now, you were talking about the
11 communication. After you discussed the releases with
12 EBID, then you communicate that release to
13 Reclamation, right?

14 A. Right.

15 Q. You described during your direct examination
16 how that's done, right?

17 A. Right.

18 Q. Then it takes three days from water to travel
19 from Caballo to the top of EP1, right?

20 A. Right.

21 Q. Then it takes another day to get from the top
22 of EP1 to the bottom of EP1; is that correct?

23 A. Right.

24 Q. I want to show you a page, Mr. Rios, in the
25 Operating Agreement, which you discussed with Ms.

1 Klahn, and this is just going to be -- you indicated
2 you're familiar with the Operating Agreement, right?

3 A. I'm familiar with it. Do I know it by heart?
4 No.

5 Q. You can let me know. I'm not going to ask
6 you any questions, I think, that you won't know. What
7 we're going to do is turn to Page 17.

8 A. Okay.

9 Q. And -- and here, we can see what's called
10 Appendix B, Required Flow Metering Stations. Do you
11 see that?

12 A. Yes.

13 Q. You understand that the Operating Agreement
14 contains a list of required flow metering stations?

15 A. Yes, sir.

16 Q. And we can see here, the first set that's
17 being highlighted right now for you, Mr. Rios,
18 says, "The following continuous stage recorders shall
19 be maintained by the United States." My first
20 question is: Can you please tell us what a continuous
21 stage recorder is?

22 A. Continuous stage recorder has become a tool
23 now that used to be a very small little stage recorder
24 where they would have a recorder inside but now,
25 they've become real big where not only the stage

1 recorder is kept in there, telemetry is kept in there
2 now. So they're -- go ahead.

3 **Q. Oh, no, please finish your answer.**

4 A. The stage recorder now -- the stage recorder,
5 it's a building now almost compared to the old days
6 because -- and those -- those little block houses,
7 whatever you want to call them, we have our equipment,
8 EBID has equipment, USBR has equipment, and there's
9 still, if not three, at least four, even the Boundary,
10 but I'm not too familiar if Boundary has their stuff
11 in there, but I think Boundaries are also in there.
12 But there's three or four using those stage recorders
13 to monitor the information that's needed.

14 **Q. When it says continuous, does that mean it's**
15 **reading all the time?**

16 A. Yes, sir.

17 **Q. All right. And then if we go a little bit**
18 **further down, you can see the beginning here. It**
19 **says, "The following continuous stage recorders shall**
20 **be maintained in EBID." You understand that there's a**
21 **number of metering stations throughout EBID, right?**

22 A. Yes, sir.

23 **Q. And we can see here. This is going to**
24 **continue to Page 18. Let's just take a look at those**
25 **and see what they look like and then they go to Page**

1 19 and then they go to Page 20 and then here at the
2 bottom is where the EBID ones stop, and you see there,
3 Mr. Rios, then it says, "The continuous stage
4 recorders shall be maintained by EPCWID"?

5 A. EP1.

6 Q. EP1. You understand that EP1 also has a
7 number of continuous stage recorders throughout the
8 District, right?

9 A. Yes, sir.

10 Q. And we can look here. These also continue
11 for a couple of pages, Page 21 and Page 22. We talked
12 about this at the deposition, but most of these,
13 Mr. Rios, I think you've told me are operational,
14 right, to your knowledge?

15 A. They are.

16 Q. And so you use those to monitor the water as
17 it travels down through the system, right?

18 A. Yes, sir.

19 Q. Including monitoring water as it travels
20 through EBID?

21 A. Yes, sir.

22 Q. And that means that during the irrigation
23 season, you know where the water is located within the
24 Rio Grande Project?

25 A. Yes.

1 Q. And then using the travel time to meters, you
2 also know when the water that EP1 has ordered will
3 arrive, right?

4 A. Yes, sir.

5 Q. And then here's the important part, EP1
6 generally receives the water that it orders, right?

7 A. Yes, sir.

8 Q. If necessary to ensure that EP1 receives its
9 water, you sometimes do a river boost releasing
10 additional water?

11 A. Yes. Or sometimes by talking to James on the
12 water order, like he'll -- he's scheduled to pick up
13 extra water at Mesilla Dam and we both discuss how the
14 river is acting and we're running short. He says, you
15 know, Robert, to help you out, I'm going to pick up
16 the 50 feet at Mesilla. Let's wait until tomorrow
17 morning, give yourselves a little shot, and that will
18 cause us not to boost the river, just to leave it
19 alone for 24 hours, see what it's going to do.

20 Q. Sounds sensible. I want to ask you about a
21 provision in the operations manual. Let's take a look
22 at that. Let's look at the next page. You're
23 familiar with the operations manual, right?

24 A. You asked me that already one time. Yes, to
25 a certain point. I don't know it by heart.

1 Q. Well, again, if there's anything you don't
2 know, please let me know, and we'll make sure you
3 don't have to testify to that. I'm actually concerned
4 about one or two provisions. Let's turn to Page 9,
5 Section 4.3. Yeah, you can highlight that. This is
6 called, "Sharing of Shortages." Just generally,
7 Mr. Rios, you understand the operate -- operations
8 manual contains a provision for actually sharing
9 shortages, right?

10 A. Right.

11 Q. Which means if there's a hundred CFS or more
12 below the EP1 order, right?

13 A. Right.

14 Q. My question is: Has EP1 ever invoked this
15 provision? In other words, have you ever done this?

16 A. I'm going to say no.

17 Q. All right. Let's turn --

18 A. We worked through it.

19 Q. You worked through it in coordination with
20 EBID?

21 A. Yes, sir.

22 Q. All right. We can take that down. We talked
23 again quite a bit yesterday about allotments and so I
24 just want to, again, fill in a couple of gaps. Now,
25 you're familiar with the district allotments, right?

1 A. Yes, sir.

2 Q. And as a reminder, every year, the farmers
3 receive an allotment of water, right?

4 A. Yes, sir.

5 Q. And that's an amount of water assigned to
6 each acre of land within the district?

7 A. Yes, sir.

8 Q. The Board actually sets those allotments?

9 A. Right.

10 Q. And during a full supply year, the allotment
11 to EP1 farmers is 4 acre-feet per acre?

12 A. Right.

13 Q. You've indicated on direct, you've worked for
14 the District since 1980, and even before that, you
15 were working for Reclamation, right?

16 A. Right.

17 Q. And during the period 1979 to 2002, those
18 were full supply years, right?

19 A. Right.

20 Q. And this is something that I'm trying to get
21 verify here, Mr. Rios. So we're going to look at New
22 Mexico Demonstrative Exhibit 3. Here you can see the
23 EPCWID -- the EP1 allotment there on the right-hand
24 side. Do you see that?

25 A. Yes.

1 **Q.** Are you able to tell me whether or not these
2 are accurate?

3 A. No.

4 **MS. KLAHN:** Objection; foundation and
5 relevance. This is clearly an exhibit. This is the
6 same exhibit that was shown to Mr. Reyes yesterday. I
7 have the same objection. These numbers are, you know,
8 verifiable, I'm sure, from some public source, and to
9 ask this witness to try and verify them sitting here
10 without his data in front of him -- it also wasn't
11 disclosed for Mr. Rios' cross.

12 **JUDGE MELLOY:** Well, he's already said
13 he can't identify them or verify them, so it's kind of
14 a moot issue so I'll overrule it since he's already
15 answered.

16 Go ahead, Mr. Wechsler.

17 **MR. WECHSLER:** Thank you.

18 **Q.** **(BY MR. WECHSLER)** That's the only question I
19 had about this, Mr. Rios. Let's talk about tracking
20 the allotments. As we've heard, you have telemetry
21 throughout the district, right?

22 A. Yes, sir.

23 **Q.** You also monitor the amount of water that
24 comes from the drains?

25 A. Not really because there 's not much, other

1 than the Montoya drain.

2 Q. And, naturally, you're anticipating my point,
3 but let me ask -- back up and say, you do have meters
4 in the drains, right?

5 A. Yes, sir.

6 Q. Right. So then you indicate the only drain
7 that consistently delivers water now is the Montoya
8 drain, right?

9 A. Yes, sir.

10 Q. But you did indicate in the past, there used
11 to be water in those drains, right?

12 A. Yes, sir.

13 Q. Let's take a look at where that Montoya drain
14 is located. We're going to use this Google Earth
15 exhibit that we have, and what we're going to do here
16 is we're going to open the arrow for No. 6, and then
17 we're going to open the arrow for EBID and open the
18 arrow for EBID major conveyances and then open the
19 arrow for other canal laterals and then open the arrow
20 for EBID drains and then just click on the box next to
21 Montoya drain. There it is. Now, double click on
22 Montoya drain?

23 MS. KLAHN: Your Honor, while we're
24 waiting for this to come up, maybe I could get a point
25 of clarification. I had understood that cross

1 exhibits needed to be disclosed prior to the
2 cross-examination of a witness, and we've had a couple
3 of exhibits that morning that weren't disclosed as
4 exhibits for Mr. Rios. Is it the Court's intention to
5 allow the use of exhibits that have been previously
6 admitted, whether or not they're disclosed for cross
7 purposes?

8 **JUDGE MELLOY:** What's your position,
9 Mr. Wechsler?

10 **MR. WECHSLER:** Well, at this point, Your
11 Honor, I think that we would take the position that
12 exhibits ahead of cross should be disclosed, and the
13 reason is we're about to switch to the New Mexico case
14 and so certainly Texas and the U.S. have received that
15 benefit, and we would also like to have that benefit.

16 **JUDGE MELLOY:** What about the ones that
17 you haven't disclosed for this witness?

18 **MR. WECHSLER:** Yeah. That would be
19 Demonstrative Exhibit 3. Our apologies there. You
20 know, we're just trying to get -- find out --

21 **MS. KLAHN:** And this one.

22 **MR. WECHSLER:** -- find out if EP1 --

23 **MS. KLAHN:** This exhibit was not
24 disclosed nor was the Operating Agreement. So, you
25 know, it's just a sauce for the goose, sauce for the

1 gander issue, I think. If that's going to be the
2 rule, then we won't have to disclose the cross
3 exhibits that we want to use. I just want to get
4 clarification.

5 **JUDGE MELLOY:** I think the clarification
6 is that they should be disclosed and so --

7 **MS. KLAHN:** Thank you.

8 **JUDGE MELLOY:** -- do you have any other
9 exhibits you're going to be using that you haven't
10 disclosed, Mr. Wechsler?

11 **MR. WECHSLER:** No, Your Honor.

12 **JUDGE MELLOY:** All right. Okay. Then
13 go ahead.

14 **MR. WECHSLER:** Thank you very much.

15 **Q. (BY MR. WECHSLER)** Mr. Rios, you're looking
16 now. You see the purple line there?

17 **A.** Yes.

18 **Q.** Do you recognize that as the Montoya drain,
19 location of the Montoya drain?

20 **A.** Being that you run it through me so fast, I
21 have to say that's what you're saying it is, it is.

22 **Q.** You don't recognize the location?

23 **A.** I recognize it down by the racetrack, but as
24 it goes up, it's hard to tell. But, okay, I'm with
25 you.

1 Q. You understand that the Montoya drain passes
2 from Texas into New Mexico, right?

3 A. Right.

4 Q. And do you generally recognize the yellow
5 line there as the location of the state line?

6 A. Right.

7 Q. Yeah. And you recognize the blue line there
8 as the Rio Grande River?

9 A. Okay. Yes. I'm with you.

10 Q. So let's -- let's talk -- you mentioned that
11 Montoya drain is the only one with water, so let's
12 look at the location of the other drains, and we're
13 going to do that by opening the arrow further down for
14 EPCWID. There it is. And then open the ones for the
15 EP1 major conveyances and then open the arrow for
16 other canals laterals and then the arrow for EPCWID
17 drains. Hang on. So open the arrow for other
18 canals/laterals and then drains at the bottom, and now
19 double click on the drains button. So looking into
20 this, and I don't want to ask you to verify that,
21 Mr. Rios, but you understand there's drains throughout
22 the EP1 area, correct?

23 A. Right.

24 Q. And I'll represent those are shown here in
25 the purple, and if I understood you correctly, these

1 drains no longer deliver water; is that right?

2 A. Right.

3 Q. You also talked about this drain-to-canal
4 project, and I just want to make sure that I
5 understand the time period you're talking about and
6 that time period is generally when you started to work
7 there in the 1970s; is that correct?

8 A. Yes, sir.

9 Q. Okay. Let's move to another issue that you
10 were talking about, and that's the effluent. Now, you
11 monitor the amount of water that comes in from those
12 wastewater treatment plants, right?

13 A. Yes, sir.

14 Q. And the water from the Haskell wastewater
15 treatment plant goes directly into the American Canal?

16 A. Yes, sir.

17 Q. And the water from the Bustamonte Wastewater
18 Treatment Plant can go either into the Riverside Canal
19 or to the drain, right?

20 A. Right.

21 Q. But you actually coordinate with the
22 operators of the Bustamonte Wastewater Treatment Plant
23 to determine whether to discharge into the drain or
24 the Riverside Canal, right?

25 A. Right.

1 Q. And during the irrigation season, all of that
2 water goes into the canals?

3 A. No.

4 Q. You don't recall telling me that during your
5 deposition?

6 A. No. During the irrigation season from May to
7 the end of September, they're entitled to the
8 combination of 2,000 acre-feet, which is they order
9 it, and they order in a sense, like, 7 CFS per day to
10 feed the Rio Bosque.

11 Q. The farmers use the effluent from the
12 wastewater treatment plants; is that right?

13 A. Right.

14 Q. And, in fact, you told me they use every
15 drop, right?

16 A. Who's "they," the farmers?

17 Q. The farmers.

18 A. They use every drop that the plant will put
19 out, but you understand that they -- the plant's got
20 to give a little bit of water to the Rio Bosque.

21 Q. Understood. I understand your testimony on
22 that. And then that water is used actually to satisfy
23 the farm orders; is that right?

24 A. During what, the return flow? During
25 allotment or --

1 Q. During the irrigation season.

2 A. Yes. It's in the system. We try to use it.

3 Q. I understood.

4 A. As least as possible because you've got to
5 understand that water goes up and down. It's more
6 hard to control than to try to use it.

7 Q. Understood. But as you just testified, the
8 farmers use every drop that's available, right?

9 A. Right.

10 Q. All right. You talked a little bit about
11 those groundwater wells, and we heard at length from
12 Mr. Reyes yesterday, but there's a couple things I
13 wasn't sure of from Mr. Reyes. That is about the
14 salinity. So the typical salinity for those EP1
15 district wells is approximately 1,500 to 2,000 TDS; is
16 that right?

17 A. They're more like 2,000. I wouldn't say 15.

18 Q. You recall having your deposition taken,
19 Mr. Rios? Do you recall having your deposition taken?

20 A. Yes.

21 Q. And you recall being asked about the salinity
22 of those wells?

23 A. Not anymore. I'm sorry.

24 Q. That's okay. We're going to look at Page 78,
25 Lines 14 to 21. We can see there that you were

1 asked, "QUESTION: And do you have a typical TDS on
2 the wells or does it vary too much?" You
3 say, "ANSWER: It varies. If you hang around the
4 river, there's -- some are good, but a lot of them
5 hang around the 15 to 2,000 TDS."

6 "QUESTION: I'm sorry, Mr. Rios. Did you say
7 50 or 1,500?"

8 "ANSWER: 1,500 to 2,000."

9 Do you recall giving that testimony?

10 A. I'm reading it, yes.

11 Q. If the TDS on the wells is higher than 2,000
12 TDS, the farmers don't want the water; is that right?

13 A. No. They don't want it, but it is what it
14 is.

15 Q. So your rule of thumb is that if the water is
16 higher than 2,000 TDS, EP1 doesn't use those
17 groundwater wells, right?

18 A. We say 2,000, they'll use it, but we try --
19 we only use it -- we don't use it during the
20 non-allotment. We're not releasing. That's what
21 you've got to understand. If we're not releasing, we
22 don't use them during the winter.

23 Q. One thing that you do to address salinity is
24 you blend or commingle the well water with the project
25 water to help lower the TDS, right?

1 A. Right.

2 Q. All right. Let's talk a little bit about
3 district charges. To do this, I just want to point
4 something out to the Special Master. Again, in the
5 operations manual, New Mexico Exhibit 2464. Actually,
6 scroll back out out of that. If you see this as
7 Section 4.5.3, Mr. Rios, this is called an example of
8 EPCWID's monthly water allotment charges report. Do
9 you see that?

10 A. Yes, sir.

11 Q. And every month, EP1 provides a -- a tally of
12 its allocation charges; is that correct?

13 A. Yes, sir.

14 Q. And it's done on a form that looks a lot like
15 this one, correct?

16 A. Yes, sir.

17 Q. Now, we can look below that figure, and we
18 can see there, it indicates that charges to EP1 are
19 made at the following diversion points, and then it
20 lists a number of them. Those are the points at which
21 EP1 is charged?

22 A. You're talking about La Union East?

23 Q. Well, I'm just asking you to verify that
24 these are the points at which EP1 is charged?

25 A. You're talking in the bottom like La Union

1 East Canal Texas portion.

2 Q. Right. Do you see that -- do you see --

3 A. The one -- okay. Yes.

4 Q. Yeah. I just want to make sure that you're
5 answering the right question, Mr. Rios. Do you see
6 the list of --

7 A. Yes.

8 Q. -- diversion points A through G?

9 A. Yes.

10 Q. And those are the places that EP1 is charged;
11 is that correct?

12 A. Yes.

13 Q. All right. I just have a couple last sort of
14 miscellaneous questions for you, Mr. Rios, and the
15 first has to do with pecans. Do you know how much
16 water pecans require each year?

17 A. The only thing I can tell you is what they
18 tell me, and most farmers will tell me they need 48
19 inches.

20 Q. All right. Well, I don't want to get into
21 that if the basis for your knowledge is just something
22 that somebody else told you; is that right?

23 A. Yes, sir.

24 Q. Let's move on then. So I want to talk a
25 little bit about water users within the District. So

1 one of your jobs is to ensure that farmers are not
2 taking more water than they're allowed to take; is
3 that right?

4 A. Yes, sir.

5 Q. We heard testimony yesterday about the
6 contracts with the City that the City has with EP1 and
7 so I want to ask about the water that the City leases
8 from EP1 farmers. So when the City leases water from
9 an EP1 farmer, then the farmer is not allowed to use
10 water on his or her land; is that correct?

11 A. Yes, that's correct.

12 Q. And do you monitor to make sure that those
13 farmers are not using that water?

14 A. Yes, sir.

15 Q. But sometimes you actually catch some farmers
16 that are using when they're not supposed to, correct?

17 A. Yes, sir. Well, not farmers. It's mainly
18 the small tracts, the 1 or 2 acres that would be doing
19 that.

20 Q. So what do you do when that happens?

21 A. Being they're not our accounts but they're
22 the PSB's, the City of El Paso or the Lower Valley
23 Water District. The Lower Valley Water District has
24 taken a very strong stance on it. If they find the
25 people taking water, they will fine them. First usage

1 will be -- I'm not sure, but they do fine them. The
2 second time, it's a very high charge. They do fine
3 them.

4 Q. All right. Finally, again, we talked with
5 Mr. Reyes yesterday about regulation and
6 administration by the State of Texas. Mr. Rios,
7 you're the water master for the district, right?

8 A. Yes, sir.

9 Q. But you have not -- you do not ever interact
10 with anyone from TCEQ; is that correct?

11 A. No, sir.

12 Q. You do not ever interact with anyone from the
13 Texas Groundwater Development Board; is that correct?

14 A. No, sir.

15 MR. WECHSLER: Thank you very much,
16 Mr. Rios. I appreciate your testimony. No further
17 questions.

18 JUDGE MELLOY: Ms. Klahn -- well,
19 Mr. Wallace, I assume you don't have anything; is that
20 correct?

21 MR. WALLACE: No questions. Thank you,
22 Your Honor.

23 JUDGE MELLOY: Ms. Klahn, do you have
24 anything further?

25 MS. KLAHN: I have about three

1 questions, but if I could just have about two minutes
2 to put my notes together and collect the sticky notes
3 from the other people in the room, that would be
4 great.

5 JUDGE MELLOY: All right. We'll take a
6 couple minutes.

7 MS. KLAHN: Thanks.

8 (Recess.)

9 JUDGE MELLOY: Are you ready to go,
10 Ms. Klahn?

11 MS. KLAHN: Yes, sir.

12 JUDGE MELLOY: All right. You may
13 proceed.

14 MS. KLAHN: All right.

15 REDIRECT EXAMINATION

16 BY MS. KLAHN:

17 Q. Hello, Mr. Rios. Let's -- let me just
18 revisit a couple of topics that Mr. Wechsler covered
19 with you. During your testimony with me, we talked
20 about your experience of receiving or not receiving
21 the water you ordered from the Bureau of Reclamation
22 prior to the 2008 Operating Agreement. Do you recall
23 that?

24 A. Yes, ma'am.

25 Q. And then Mr. Wechsler asked you under the

1 2008 Operating Agreement, EP1 does receive the water
2 it orders; is that correct?

3 A. Right.

4 Q. So the clarification I wanted to make was
5 that EP1 receives the water it orders since the 2008
6 Operating Agreement; is that correct?

7 A. Yes, ma'am.

8 Q. Okay. Let's talk a little bit about the
9 drains. I think there's some confusion about what
10 drains actually do. Let's take a look at Reyes Demo
11 4, please, again. That's the map. So yesterday, we
12 talked about the drains within the EP1 boundaries
13 below the American Dam. Let's just take a step back
14 and talk about the drain ability to form a part of the
15 farmers' water supply in EP1. Would you agree that
16 the Montoya drain, which comes in above the American
17 Dam, does form a part of EP1 farmers' water supply
18 when there's water being delivered?

19 A. Yes.

20 Q. So the river drain and the Mesa drain and the
21 Fabens waste drain, you testified this morning that
22 those were all located, I think in one case you said
23 far below the level of the canals? Did I get that
24 right?

25 A. Yes.

1 Q. So at some point, Mr. Wechsler asked you is
2 it true that the drains no longer deliver water. Did
3 the -- did the -- other than the Montoya drain, did
4 the drains below American Dam within EP1 ever deliver
5 water to farmers in EP1?

6 A. No.

7 Q. Okay. And then there was some discussion of
8 the waste out of the end of the system with
9 Mr. Wechsler. My question about that is any waste
10 that gets to the tail end of EP1 is accounted for at
11 the end of the year; is that your understanding?

12 A. It's -- it's accounted every month, and it --
13 for the year, the whole year, yes.

14 Q. Okay. And Dr. Blair does that year-end
15 accounting; is that correct?

16 A. Yes.

17 Q. Okay.

18 A. And it comes off the telemetry river team
19 charts.

20 Q. Okay. The last question I have is related to
21 your testimony about TDS in the wells, and I
22 understand you testified during your deposition that
23 the TDS in the wells is between 1,500 and 2,000. The
24 question I have is whether that range of TDS numbers
25 was limited to the wells in the lower valley when you

1 testified about that during your deposition; do you
2 recall?

3 A. Yes. I think so.

4 Q. What do you -- you think it was?

5 A. Yes.

6 Q. Are you familiar with measurements of TDS in
7 the wells in the lower valley that are higher than
8 2,000?

9 A. Yes.

10 Q. How high have you seen TDS values from the
11 wells in the lower valley?

12 A. I see them as high as 3,000.

13 Q. Okay. On multiple wells?

14 A. Right now, yes. I know we got three that are
15 hitting at 3,000.

16 Q. Okay. And the last question, sorry, is you
17 had a conversation with Mr. Wechsler about the
18 Operating Agreement Manual, and he called your
19 attention to the shortage sharing provision and asked
20 you if that had ever been implemented. Do you have
21 any recollection of whether that shortage sharing
22 provision was implemented during 2021?

23 A. Sarah, I'm going to have to say no. We -- we
24 worked it through, me and James, when we were short,
25 but did I go in there -- did I go in there and say you

1 need to give me water because of this shortage, no.
2 We worked it out, and it worked out pretty good.

3 Q. So your testimony with Mr. Wechsler about
4 working it out, that related to your efforts this year
5 with Mr. Navares; is that right?

6 A. Yes.

7 MS. KLAHN: Okay. I don't have any
8 further questions at this time.

9 JUDGE MELLODY: Mr. Wechsler, anything
10 further?

11 MR. WECHSLER: I do have a couple of
12 follow-up questions, Your Honor.

13 RECROSS EXAMINATION

14 BY MR. WECHSLER:

15 Q. Mr. Rios, it has to do with your responses
16 about the drain water. So, again, you started working
17 in roughly 1973 in this area; is that right?

18 A. Yes, sir.

19 Q. So when you gave that answer that no water
20 had been delivered in the drains, you're talking about
21 from 1973 going forward; is that correct?

22 A. Yes, sir.

23 Q. Are you generally aware that water was
24 delivered in the drain to canal prior to 1973?

25 A. No, I don't know.

1 **MR. WECHSLER:** Fair enough. No further
2 questions. Thank you.

3 **JUDGE MELLOY:** Let me just follow up
4 with one thing, and I -- I don't know where we're
5 going with this whole TDS issue, but, Mr. Rios, do you
6 sample water every time you pump for TDS?

7 **THE WITNESS:** We sample every time for
8 TDS, and every time we meter the headings, we sample
9 the TDS.

10 **JUDGE MELLOY:** And what heading are you
11 referring to?

12 **THE WITNESS:** The Riverside heading.
13 Any measurements that we perform in our system, the
14 hydrotech for the river team individual has a meter to
15 take a TDS reading on that particular site.

16 **JUDGE MELLOY:** Okay. And do you -- do
17 you have records of what those TDS readings are so if
18 we want -- if we wanted to know the TDS of -- of a
19 particular well, we could go look at a record and show
20 a record of that well?

21 **THE WITNESS:** I want to say right now on
22 the wells, the TDS is not very well kept. That's
23 something I've asked the well manager to start doing,
24 to keep records of it. He hadn't been doing that in
25 the past.

1 **JUDGE MELLOY:** Okay. All right. Thank
2 you. That's all I have. Any follow-up on that?

3 **MS. KLAHN:** No, Your Honor.

4 **JUDGE MELLOY:** All right. Thank you,
5 Mr. Rios. You're excused. We appreciate your
6 testimony. Thank you very much.

7 **THE WITNESS:** Thank you.

8 **JUDGE MELLOY:** All right. Well, since
9 we're a little bit ahead of schedule, why don't we
10 take our afternoon break -- our first break at this
11 point, and why don't we make it a little longer one
12 since it looks like we're, like I said, well ahead of
13 schedule. Let's break until 1:15 my time. That'll be
14 about a 40-minute break, and then we'll come back with
15 -- with I guess will be our final witness before next
16 Monday, right?

17 **MS. KLAHN:** That's right.

18 **JUDGE MELLOY:** Okay. All right.

19 **MS. KLAHN:** All right.

20 **JUDGE MELLOY:** Let's break then. Thank
21 you, everyone.

22 **MS. KLAHN:** Thank you.

23 (Recess.)

24 **JUDGE MELLOY:** All right. Are we ready
25 to resume? Let me ask the parties to enter their

1 appearances for this witness. Ms. Barfield?

2 **MS. BARFIELD:** Yes, good morning, Your
3 Honor. This is Theresa Barfield on behalf of the
4 State of Texas.

5 **JUDGE MELLOY:** Who do we have for New
6 Mexico this afternoon?

7 **MR. KOPP:** Good afternoon, Your Honor.
8 This is Michael Kopp for the State of New Mexico.

9 **JUDGE MELLOY:** Okay. Mr. Dubois?

10 **MR. DUBOIS:** James Dubois for the United
11 States, Your Honor.

12 **JUDGE MELLOY:** And Mr. Wallace?

13 **MR. WALLACE:** Chad Wallace for the State
14 of Colorado.

15 **JUDGE MELLOY:** All right. Before we
16 call the witness, let me mention, there's quite a bit
17 of confusion about the exhibits for Mr. Rios, but
18 there was one exhibit that was on the
19 cross-examination list for New Mexico, New Mexico No.
20 2058, which was denoted as an A exhibit so that will
21 be shown as admitted. So that we can maybe get right
22 into the testimony of our next witness, Mr. Balliew,
23 let me try to figure out where we are with those
24 exhibits. On the U.S. direct examination -- you're
25 going to go first, is that right, Mr. Dubois?

1 **MR. DUBOIS:** Ms. Barfield is.

2 **JUDGE MELLOY:** All right. Okay. We
3 have Balliew Demo No. 2 as an A, which will be
4 admitted. Demo No. 3 is an A, which will be admitted.
5 Texas 86, Texas 90 are both A and will be admitted,
6 and New Mexico 458 and New Mexico 1672 are both
7 indicated as A exhibits and will be admitted. For
8 cross-examination, we have Texas -- excuse me -- Joint
9 Exhibit 410, which is A, will be admitted. New Mexico
10 2287, now, that is also denoted as US-77 and Texas 88.
11 This -- this could end up getting very confusing. Do
12 we want it admitted under all three numbers or --

13 **MR. KOPP:** I think I can speak to that,
14 Your Honor. We had exchanged these lists with the
15 other parties before that document was admitted
16 yesterday, as I believe Texas 88, and we're fine using
17 that copy as the exhibit copy.

18 **JUDGE MELLOY:** Okay. So that's in as
19 Texas 88. Then there's New Mexico 426, New Mexico
20 226, New Mexico 427, New Mexico 87. Those are all A
21 exhibits and will be admitted. It looks like New
22 Mexico is going to use -- or may use US-67, which is
23 already in evidence, then New Mexico 2311 and New
24 Mexico 198 are A exhibits and will be admitted. New
25 Mexico 199 will be admitted. New Mexico 7 will be

1 admitted. New Mexico 235 will be admitted. New
2 Mexico Demonstrative 19 will be admitted, and New
3 Mexico Demonstrative 21 will be admitted. As we
4 previously indicated for all the demonstrative
5 exhibits, whether they're Texas, U.S., or New Mexico,
6 they're admitted for demonstrative purposes only. Any
7 question about any of that?

8 All right. Then Ms. Barfield, you may
9 call your witness.

10 **MS. BARFIELD:** The State of Texas calls
11 John Balliew.

12 **JUDGE MELLOY:** Good morning.
13 Mr. Balliew, would you raise your right hand, please?
14 Do you swear or affirm that the testimony you're about
15 to give will be the truth, the whole truth, and
16 nothing but the truth?

17 **THE WITNESS:** I do.

18 **JUDGE MELLOY:** All right. You may put
19 your hand down. Would you please state and spell your
20 name for the record, please?

21 **THE WITNESS:** John Eric Balliew,
22 B-A-L-L-I-E-W.

23 **JUDGE MELLOY:** Mr. Balliew, I'm going to
24 ask you a couple preliminary questions, which we've
25 gone over with all the other witnesses. First of all,

1 let me ask you: Is there anyone in the room with you?

2 THE WITNESS: No, sir.

3 JUDGE MELLOY: Do you have any documents
4 or papers that you will be referring to during your
5 testimony other than the exhibit books?

6 THE WITNESS: No, sir.

7 JUDGE MELLOY: And I need to advise you
8 that you're not allowed to have any communication
9 devices available to you, including iPhones, iPads,
10 laptop computers that have any type of e-mail,
11 texting, instant messaging capability and that sort of
12 thing. Do you understand?

13 THE WITNESS: Yes, sir.

14 JUDGE MELLOY: All right. Thank you.
15 Ms. Barfield, you may proceed.

16 MS. BARFIELD: Thank you, Your Honor.

17 JOHN BALLIEW,
18 having been first duly sworn, testified as follows:

19 DIRECT EXAMINATION

20 BY MS. BARFIELD:

21 Q. Good morning, Mr. Balliew.

22 A. Good morning.

23 Q. Where are you employed?

24 A. I'm employed by El Paso Water Utilities.

25 Q. What is the business address?

1 A. 1154 Hawkins Boulevard, El Paso, Texas 79925.

2 **Q. What is El Paso Water Utilities?**

3 A. El Paso Water Utilities is the service
4 provider for water, wastewater, reclaimed water, and
5 storm water services for the City of El Paso and for
6 most of El Paso County.

7 **Q. Is it okay if I shorten that to El Paso Water**
8 **today?**

9 A. Yes.

10 **Q. All right. Now, in what capacity are you**
11 **employed with El Paso Water currently?**

12 A. I'm the president of El Paso Water.

13 **Q. Okay. Why don't we take a look at the**
14 **structure of El Paso Water. Let's look at what's been**
15 **marked as and admitted as Texas 0086. Mr. Balliew,**
16 **have you seen this document before?**

17 A. Yes, I have.

18 **Q. What is it?**

19 A. This is an organizational chart for El Paso
20 Water.

21 **Q. All right. So if you could walk us through**
22 **some of the basic details starting with what's at the**
23 **top of the organizational chart labeled, "Public**
24 **Service Board."**

25 A. The Public Service Board is the governing

1 board for El Paso Water, so it is a board that
2 consists of the mayor of the City of El Paso and
3 appointees that are appointed by city council to run
4 the utility. So I report to the Board and then I have
5 some people that work for me. At the top there, you
6 see a legal services branch and administrative
7 support.

8 **Q. Okay. And then I see also three primary**
9 **branches that umbrella under that level?**

10 A. Yes. The organization is divided up in three
11 parts, so we have the operational and technical
12 services, which are the people that run the
13 organization, that turn things on and off, treatment
14 plant operators, that sort of thing. That's
15 operations. Technical services would be the
16 engineering section and -- and the engineering
17 technicians, that sort of thing, and then we have a
18 water resources section where we have our water
19 resource manager and some hydrogeology people.

20 **Q. And who is the water resources manager for El**
21 **Paso Water?**

22 A. Scott Reinert.

23 **Q. All right. Why don't you tell us a little**
24 **about then the middle section of this chart?**

25 A. The middle section is the business side of

1 the organization, which we refer to as the strategic
2 financial and land management services and this
3 consists of our land department. El Paso Water
4 differs from many utilities in that we have a lot of
5 land holdings. We have the IT department, information
6 technologies, human resources, and then the -- the
7 finance part of it, which is your basic accounting,
8 budgeting, customer service, and purchasing.

9 **Q. Thank you. And what about the far right or**
10 **my right of this chart?**

11 A. The far right is our communications and
12 government affairs department. So we have a
13 government affairs department that handles the
14 relationship between us and the city, county, state,
15 and federal government. We also have a water
16 conservation and tech H2O. That's our water
17 conservation department and the learning center where
18 we do education, and then we have, also, the
19 communications department, our media people.

20 **Q. All right. Now, from the structure of this**
21 **chart, it appears that you have supervisory control or**
22 **authority rather over all of the aspects of El Paso**
23 **Water with the exception of the public service board**
24 **itself; is that correct?**

25 A. That is correct.

1 Q. All right. You can take that down. Why
2 don't we pull up what's been labeled as Balliew John
3 Demo 3. Mr. Balliew, have you been disclosed in this
4 matter as a nonretained expert by the State of Texas?

5 A. Yes.

6 Q. All right. So we've just put up on to the
7 screen Demo No. 3, which appears to be a document
8 that's labeled, "The State of Texas' Amended Third
9 Supplemental Disclosure of Expert Witness
10 Information." I'll reflect that the date is June 10th
11 of 2020. Have you seen this document before?

12 A. Yes, I have.

13 Q. Okay. Generally speaking, do you understand
14 what this document does?

15 A. Yes.

16 Q. Okay. And what is that?

17 A. It just indicates that I'm going to be a
18 witness and describes some of the things that I'm
19 going to speak about.

20 Q. Okay. And were you consulted by the State of
21 Texas before you were identified within this document
22 as a nonretained expert?

23 A. I was not.

24 Q. All right. Have you reviewed the portions of
25 the document that are pertinent to your testimony that

1 you're going to offer here today?

2 A. Yes, I have.

3 Q. Okay. And let me direct you and the Court to
4 Page 1 and Page 2. And could we split -- there we go.
5 Okay. So at the lower portion of Page 1, I see that
6 you were named as identified; is that correct?

7 A. Correct.

8 Q. Okay. And there's a bit of text that
9 follows. You didn't write this text; is that right?

10 A. I did not.

11 Q. But nonetheless, can you briefly describe for
12 us a summary of the nature of the testimony that you
13 will provide today?

14 A. To talk about the facilities, that is El Paso
15 Water's facilities, what they do and how we operate
16 them, and then when it pertains to surface water, how
17 we get the water rights that we use in those
18 facilities and how they're delivered and what the
19 purpose of that is and then, of course, we also have
20 groundwater resources and so I would be talking about
21 the groundwater resources that are available and how
22 they're used, including the historic use.

23 Q. All right. And then the paragraph that's set
24 forth or highlighted here, does it accurately reflect
25 the nature in addition to the details you just

1 provided of the testimony you're going to offer today?

2 A. Yes, it does.

3 Q. I note that there's a statement at the
4 beginning referable to the facts and opinions being
5 from the perspective of you as president and CEO. Is
6 it your understanding and do you agree that your
7 testimony today is confined to your perspective as the
8 president and CEO of El Paso Water?

9 A. Yes.

10 Q. Okay. Lastly -- and if you could take down
11 this particular blowup. Thanks.

12 At the end of the paragraph above what we
13 were just looking at, I see a statement that
14 says, "Injuries sustained or damages incurred." To be
15 clear, you have not been retained by the State of
16 Texas to offer any expert opinions on issues of
17 damages claimed by the State of Texas; is that
18 correct?

19 A. Correct.

20 Q. All right. I do understand, however, that
21 you will offer testimony today in the form of facts
22 depicting injuries; is that correct?

23 A. Correct.

24 Q. All right. And the fact testimony that I
25 just described will include information regarding

1 certain costs that have been associated with projects
2 that EPW or El Paso Water performed; is that right?

3 A. Yes.

4 Q. Okay. Why don't we move on to Texas 0090.
5 Now, does this appear to be a copy of your current
6 professional resume?

7 A. Yes.

8 Q. How many pages is it all together?

9 A. It's about three -- two or three page --
10 three pages.

11 Q. All right. Now, did you prepare this?

12 A. I did.

13 Q. Okay. And is it a true and accurate
14 representation of basically your educational history
15 and professional career?

16 A. Yes, it is.

17 Q. All right. Is it up to date?

18 A. Yes. It's current.

19 Q. Okay. Let's talk a bit about your
20 educational background. Where did you go to college?

21 A. I went to Texas A&M University.

22 Q. Did you earn a degree?

23 A. I earned a bachelor of science degree in
24 chemical engineering.

25 Q. What year did you earn that?

1 A. 1982.

2 Q. Now, Mr. Balliew, despite the fact that
3 you've earned a bachelor of science in chemical
4 engineering, you're not here to testify as an expert
5 in chemical engineering today, correct?

6 A. Correct.

7 Q. All right. Was there any particular
8 specialization in your degree?

9 A. Process control.

10 Q. What does that mean?

11 A. So process control is a means of automating,
12 in my case, chemical processes. So the obvious
13 example that everybody -- most everybody has in their
14 own home is a thermostat, so it's a device that
15 controls an air-conditioning system based on the
16 temperature that's detected in a room. So there's
17 various types of control systems like that, that will
18 control perhaps a chemical feed point or a pressure.

19 Q. Okay. Do you hold any professional licenses?

20 A. I hold a professional engineer's license in
21 the State of Texas.

22 Q. And similar to what we discussed with regard
23 to your degree in chemical engineering, despite the
24 fact that you hold that license, you are not here to
25 offer expert testimony as a professional engineer; is

1 that right?

2 A. Correct.

3 Q. All right. So let's talk about your
4 professional employment after college. What did you
5 do when you graduated?

6 A. I started to work for El Paso Water right
7 after graduation.

8 Q. About what year -- so around 1982; is that
9 right?

10 A. It specifically was April of 1983 when I
11 started.

12 Q. Okay. What was your first job at El Paso
13 Water?

14 A. My first job was working in the laboratory at
15 the -- at the -- one of the water treatment plants.

16 Q. Now, we understand from your testimony a few
17 minutes ago that you're currently the president and
18 CEO of El Paso Water. Since you started there in 1983
19 to the present, have you always been employed with El
20 Paso Water?

21 A. Yes.

22 Q. All right. And your different roles as you
23 sort of moved up the ladder of El Paso Water, those
24 are all reflected on your professional resume; is that
25 right?

1 A. That is correct.

2 Q. Okay. Can you describe for us your current
3 responsibilities in the role of CEO and president of
4 El Paso Water?

5 A. So I direct the activities of the entire
6 organization, so that includes the three branches that
7 we looked at in the organizational chart, but from the
8 standpoint of what we do, it is the water utility, the
9 wastewater utility, reclaimed water and storm water,
10 and all the employees of the utility.

11 Q. Okay. How long have you been in the role of
12 president and CEO?

13 A. More than 38 years -- well, pardon me. Since
14 2013, I've been the president.

15 Q. Okay. But you've been employed with El Paso
16 Water more than 38 years, correct?

17 A. Correct.

18 Q. Okay. Are there any highlights of the
19 different roles that you have -- well, jobs that
20 you've had at El Paso Water that you'd like to share
21 with us over the course of those 38 years without us
22 going year by year?

23 A. Yes. So one of the things that I'd like to
24 talk about is when I was a water division manager. So
25 in that role, I was responsible only for the water

1 system so not the wastewater, not storm water, just
2 the water system, and so there, it was the operation
3 of the water treatment plants, at the wells, and all
4 those associated facilities.

5 **Q. Is there anything else that you'd like to**
6 **highlight for us?**

7 A. I was in the environmental compliance role,
8 as well, so I handled the regulatory aspects, so that
9 it included the regulatory aspects of water, as well,
10 in terms of the laboratory analysis and reporting of
11 those parameters.

12 **Q. All right. So let's move on and get into**
13 **some of the substance of your testimony today, and**
14 **first, I'd like to talk about the City of El Paso**
15 **water supply generally. So can you describe for us**
16 **the service area for El Paso Water?**

17 A. The service area includes all of the land in
18 the city limits, so the city of El Paso itself, and
19 then most of the county.

20 **Q. Okay. When you say "most of the county," can**
21 **you quantify in terms of maybe percentages the portion**
22 **of the county that El Paso Water services?**

23 A. We think it's about 93 percent. And when I
24 say that, it doesn't mean that the other 3 percent are
25 served by someone -- a different organization. It

1 just means that they're not served at all, being too
2 remote from the facilities.

3 Q. Okay. And in terms of numbers, what is the
4 overall population that El Paso Water serves?

5 A. Approximately 800,000.

6 Q. And can you quantify for us what percentage
7 of municipal water needs for the county overall that
8 El Paso Water serves?

9 A. We serve most of the municipal needs, and
10 that includes through -- as direct retail customers
11 and then as well as wholesale customers. So, for
12 example, wholesale might be the Fort Bliss. They are
13 one of our customers.

14 Q. Now, what about the volume of water supplied.
15 On an annual basis, can you describe the volume of
16 water for the service area that you just told us
17 about?

18 A. It's about 38 billion gallons during the
19 course of the year.

20 Q. Over the course of your career with El Paso
21 Water, has the service area expanded over time?

22 A. Yes, it has.

23 Q. In what way?

24 A. Well, when I started, we were serving only
25 within the city limits plus Fort Bliss, but as -- in

1 the '90s, we started expanding the service area to
2 encompass customers outside the city limits that were
3 in the county that did not have access to potable
4 water.

5 **Q. All right. Do you anticipate any continued**
6 **expansion of the service area for El Paso Water?**

7 A. Other than a minor little increase here and
8 there, not much, because we at this point in time do
9 provide service to the majority of the county, and
10 that part that we don't supply service to is probably
11 too remote and too spread out from each other to
12 warrant any kind of public investment.

13 **Q. All right. So let's move on, and let's talk**
14 **a bit about the sources of water for El Paso Water and**
15 **the -- the water rights that are associated with that.**
16 **So first, is there a surface water source that's**
17 **utilized by El Paso Water to serve the municipal needs**
18 **that you've described?**

19 A. Yes. The Rio Grande River.

20 **Q. And is that the only surface water source for**
21 **El Paso Water?**

22 A. Yes, it is.

23 **Q. All right. Are there also groundwater**
24 **sources utilized by El Paso Water?**

25 A. Yes. There are two aquifers. We have the

1 Mesilla Bolson aquifer on the west side of town. We
2 have the Hueco Bolson aquifer on the east side of
3 town, and both of those aquifers have freshwater and
4 brackish water zones.

5 Q. All right. Now, generally speaking, are
6 there historical contracts with EP1 and others that
7 provide rights for El Paso Water to utilize the
8 surface water of the Rio Grande?

9 A. Yes, that's correct.

10 Q. Okay. And I know that we've had some
11 testimony from other witnesses, including Mr. Reyes,
12 regarding those contracts, but have you had heard of
13 the term water-righted acres?

14 A. Yes.

15 Q. All right. And does that apply to Rio Grande
16 Project water rights?

17 A. Yes. Rio Grande Project, correct.

18 Q. All right. What is your understanding of
19 that term?

20 A. What that means is that we have certain land
21 that we own outright that has water rights associated
22 with it and then we have other leases or assignments
23 of water rights where we don't actually own the land,
24 but we have obtained water. So, for example, in the
25 -- in the land that we own, we, of course, purchase it

1 outright, but the -- the assignments when the city
2 expands and let's say a farmer subdivides, then we
3 obtain the individual assignments for all the little
4 bits and pieces that that farmer, after he divided it
5 up. So we aggregate all those things together, and
6 that's how we obtain surface water from the -- from
7 the Rio Grande. We don't have any direct water right
8 from the Bureau of Reclamation or -- or anyone. We
9 just are a customer or a user, that is, of the El Paso
10 County Water Improvement District No. 1 system.

11 **Q. Okay. So all of these rights derive out of**
12 **these historical contracts; is that correct?**

13 A. That's correct.

14 **Q. Okay. How many water-righted acres of land**
15 **does the City own or lease under the contracts with**
16 **EP1?**

17 A. Well, we -- we own approximately 3,300 acres,
18 and then in terms of the -- of the assignments, it's
19 probably in the -- close to 20,000. So when we total
20 all those together and then you multiply, let's say in
21 a full allotment year, that gives us between 60 and
22 70,000 acre-feet of water.

23 **Q. Okay. And is that -- how does that translate**
24 **to the acres themselves, 1 acre-foot? Go ahead.**

25 A. I was using the full allotment so --

1 **Q. Yes.**

2 A. And the full allotment might be different for
3 each one, but approximately 3-and-a-half acre-feet per
4 acre, I would say.

5 **Q. All right. So that constitutes the maximum**
6 **delivery surface water from the Rio Grande Project**
7 **that El Paso Water is entitled to under these**
8 **contracts. Did I understand that correctly?**

9 A. That is correct.

10 **Q. Okay. And on a year-to-year basis, is all of**
11 **that used?**

12 A. On a year-to-year basis, we typically do not
13 use all of it, and the reason is because the
14 irrigation season has a finite length, a start date
15 and a stop date, and you have a certain amount of
16 demand in the system and so we can only produce what
17 -- currently, that is, we can only produce what is
18 demanded in the system. So there's sometimes at the
19 beginning of the season, perhaps when it's colder
20 weather and there's not a lot of demand, that we're
21 unable to utilize all of the water resource, and
22 likewise, in the fall, there might be a colder fall
23 and so we're unable to utilize all of that water. So
24 the most water we've ever used is about 62,000
25 acre-feet.

1 **Q. Okay. Are there any restrictions on when El**
2 **Paso Water may receive surface water from the Project?**

3 **A. Yes. We receive water during the season.**
4 **And so when I say "the season," that is the release**
5 **period that the system operates under. So at the**
6 **beginning of the year typically, beginning of the**
7 **season, there is a meeting conducted with -- with the**
8 **farmers, Texas, New Mexico, plus IBWC representing**
9 **Mexico, then they decide on the start date. We're**
10 **going to start at a particular date, and we're going**
11 **to end at a particular date. We don't have any say in**
12 **how that's done, but once that period of time is -- is**
13 **set, then we operate within that time period.**

14 **Q. All right. And El Paso Water is not part of**
15 **that decision -- decisionmaking process. Am I right**
16 **about that?**

17 **A. Correct. We're not.**

18 **Q. All right. So let's talk about the details**
19 **of the sources and the distribution of the water to**
20 **the El Paso service area.**

21 **MS. BARFIELD:** Can we pull up and look
22 at Texas 773? Can we see both pages of that? That's
23 great.

24 **Q. (BY MS. BARFIELD) So I'll represent that this**
25 **appears to be a two-page document. The left side is**

1 entitled, "City of El Paso, Water Utilities Chemical
2 Analysis-City Water." On the right-hand side, the
3 title appears to be, "El Paso Water Utilities Typical
4 Water Distribution Supply Pattern." Mr. Balliew, are
5 you familiar with this two-page document.

6 A. Yes, I am.

7 Q. Who prepared this document?

8 A. This is something El Paso Water prepares
9 under my direction.

10 Q. Okay. This is something prepared during the
11 normal course and practice of the business of El Paso
12 Water?

13 A. Yes. This is something that we have on our
14 Website, and we pass this out to customers who have
15 questions about water quality.

16 MS. BARFIELD: Your Honor, I would move
17 to admit Texas 773.

18 JUDGE MELLOY: Any objection?

19 MR. KOPP: No objection, Your Honor.

20 JUDGE MELLOY: 773 is admitted.

21 MS. BARFIELD: Thank you, Your Honor.

22 Q. (BY MS. BARFIELD) So we're going to spend a
23 little time with this so we can understand how the
24 distribution of the water supply works, so let's start
25 with the chart on the left, Mr. Balliew. What is the

1 **chart on the left intended to provide for El Paso**
2 **Water customers?**

3 A. So the purpose of this chart is to provide
4 information to our customers about the quality of
5 water. So there's a list of parameters there. That's
6 not an exhaustive list of all the parameters that we
7 test for, but these are the ones that typically we get
8 questions about, and then depending on where the
9 customer lives, they could be receiving water from
10 different sources of supply and so those sources of
11 supply are shown there as the water source locations
12 through those seven columns there.

13 **Q. There's seven water source locations**
14 **identified all together; is that right?**

15 A. Correct.

16 **Q. Okay. And then real quickly before we talk**
17 **some more detail about that table, the map on the**
18 **right, what is that intended to provide in terms of**
19 **information to the El Paso Water customers?**

20 A. So the map provides a geographic orientation.
21 So a customer can look at this map and see where they
22 live and then that -- that would correlate back to the
23 table so that they could see which source they're
24 receiving water from. Of course, there's a time
25 component to that, depending on whether surface water

1 is being provided or not.

2 Q. Now, you mentioned water quality when we were
3 talking about the table on the left. Is there a water
4 quality issue with the available groundwater?

5 A. Yes. The most common quality consideration
6 that people ask about is the salt content and so that
7 is included in that parameter called total dissolved
8 solids.

9 Q. Okay. Well, let's go ahead and let's talk
10 about that. In the table in the left-hand side, my
11 left-hand side, there is a column that
12 says, "Parameters Tested." And you've just stated it
13 does include total dissolved solids. Is that the most
14 important parameter that's listed in that column?

15 A. Yes, it is.

16 Q. And is -- sorry. I've spoken over you a tiny
17 bit. And is that the parameter that we should be
18 focusing our discussion on?

19 A. Yes.

20 Q. Okay. So why don't we take a look at Source
21 1, which is the first full column to the right of
22 parameter tested. This appears to state at the
23 top, "Upper Valley Well Field." Can you please tell
24 us what the upper valley well field is?

25 A. The upper valley well field is located in the

1 northwest portion of El Paso. It's generally known as
2 the Canutillo well field because it is located close
3 to a little community called Canutillo. We refer to
4 it as the upper valley well field because these wells
5 provide water to the upper valley water treatment
6 plant.

7 Q. Okay. Can you estimate for us a range of how
8 many wells are located in this upper valley well field
9 or the Canutillo well field?

10 A. Approximately 35 wells.

11 Q. All right. And can we see from this chart --
12 well, first of all, what year was this particular
13 table put together that we're looking at?

14 A. This was put together in 2018.

15 Q. Okay. So at least in 2018, what was the
16 average TDS of the groundwater from the wells in the
17 Canutillo well field?

18 A. So with all the wells running, that average
19 is 630 milligrams per liter of TDS.

20 Q. Now, from your perspective as the president
21 and CEO of El Paso Water and not as an expert in -- in
22 the chemical analysis itself, is that good or bad TDS?

23 A. That's good TDS. The State of Texas allows
24 up to 1,000 as a secondary standard so this is well
25 below that so we would consider this as good quality.

1 Q. Okay. And I'd like to differentiate
2 something that we heard a few hours ago from -- during
3 the testimony of Mr. Rios. He offered some testimony
4 regarding some wells, which I believe were in the
5 lower valley, that had TDS's in the range of 1,500 to
6 2,000 and then on redirect even as high as 3,000. Can
7 you describe for us, if you know, why there's such a
8 difference in the TDS in the Canutillo versus what
9 Mr. Rios spoke of?

10 A. Yes. So the water quality varies from where
11 you are, let's say east to west, and then also at
12 depth. So the wells Mr. Rios was referring to are
13 shallow wells right in the -- the alluvium close to
14 the river close to their irrigation system and
15 shallow. So that's the reason that it's a higher TDS
16 than these wells here, which we've been looking at in
17 the Canutillo well field, because you have deeper
18 sources of supply that lower TDS.

19 Q. Okay. Thank you for that. Now, going back
20 to our review of Source No. 1, where does the Source
21 No. 1 generally supply water?

22 A. Okay. If you look at the -- at the map in
23 the upper left-hand corner of that right-hand map,
24 you'll see a blue dot that says, "Upper Valley WTP."
25 That's water treatment plant. So that is the plant

1 that receives the water from the Canutillo well field.

2 **Q. Can you describe for us the upper valley**
3 **treatment plant?**

4 A. The upper valley water treatment plant is a
5 groundwater treatment plant, and the purpose of that
6 is to remove naturally-occurring arsenic that's in the
7 water and so the plant has a capacity of 60 million
8 gallons per day, but we don't have nearly enough well
9 capacity to even make 30 million gallons per day, so
10 it operates less than its capacity.

11 **Q. All right. Now, let's look at the color**
12 **coding. So we understand from the left side that**
13 **Source 1 is color coded in light blue, and then when**
14 **we look at the map on the right-hand side, can you**
15 **explain to us how the distribution for the Water**
16 **Source 1 works using the color coding?**

17 A. Yes. So the -- the light blue, as you
18 mentioned, is the water that comes from the upper
19 valley water treatment plant, so it's put into the
20 system so most of the northwest portion of the city is
21 served with the light blue water, the Canutillo well
22 field water, and then there's an interface there that
23 you see between the orange and the blue on the
24 left-hand map of the two maps, and that orange color
25 represents the surface water. So when surface water

1 is available, that blue water will only go so far.
2 Then if you look at the other map and you see when
3 surface water is not available, that blue area expands
4 to encompass some of that area that was supplied by
5 surface water during the irrigation season.

6 **Q. So in terms of the two maps depicted on the**
7 **right-hand side, it appears that those are separated**
8 **by months. Can you give us an overview of why they're**
9 **separated by months?**

10 A. You asked me about the irrigation season and
11 so the average irrigation season, typically lasts from
12 March to September, so we have a map that's March to
13 September representative of the time when water from
14 the Rio Grande is treated and put into the
15 distribution system. The other map on the right-hand
16 side of that page is the non-irrigation season, which
17 is typically from October through February. So the
18 non-irrigation season, we don't have that surface
19 water going into the distribution system so the water
20 supply has to come from the other source -- the other
21 groundwater sources.

22 **Q. Okay. Thank you for that. I'm going to ask**
23 **one more sort of orientation question, and then we're**
24 **going to talk about Source 2. In the map, there's**
25 **sort of a white area that's to the right of the light**

1 blue and kind of dips into the orange and then it's --
2 it's book ended by the gray with the vertical lines.
3 What is that white area?

4 A. Okay. That is -- the white area right in the
5 middle is the Franklin Mountains. So the city of El
6 Paso is split by a mountain range that comes right
7 down through the middle of town and then to the other
8 side over there, you have another white area, and
9 that's the Fort Bliss Military Reservation. So it
10 divides the city up from an east to west and then east
11 side is further divided into a northeast and a
12 southeast side.

13 Q. Okay. Thank you. So let's go back to the
14 chart on the left, and let's look at Source 2. So
15 that one's in orange, and what is the source of the
16 water here?

17 A. That is the Rio Grande. So the
18 Robertson-Umbenhauer plant is actually two plants
19 located side by side, which we generally refer to
20 together as an out plant. That treats water out of
21 the -- I'm going to use the term here the Rio Grande.
22 It actually doesn't draw from the Rio Grande directly
23 but from the El Paso County Water Improvement District
24 No. 1 canal.

25 Q. All right. Can you point out for us on the

1 map where the Robertson-Umbenhauer 2 plants are?

2 A. So if you follow the river down, which is the
3 dark line from the upper valley plant down where it
4 goes around the bend, there is the
5 Robertson-Umbenhauer water treatment plant, otherwise
6 known as the canal plant. That's located right in
7 downtown El Paso.

8 Q. Okay. What is the TDS or total dissolved
9 solids of the surface water that's being treated in
10 the Source 2?

11 A. So the TDS of that -- of the water here is
12 about 650 milligrams per liter.

13 Q. Okay. We know from your prior testimony,
14 that's pretty good in your book, right?

15 A. Yes.

16 Q. Okay. What is the capacity of the
17 Robertson-Umbenhauer water treatment plant?

18 A. The total complex treats 40 million gallons
19 per day.

20 Q. Okay. And then looking to our maps on the
21 right, can you just describe for us geographically how
22 that water is distributed to El Paso?

23 A. So during that irrigation season, the March
24 through September, you see the orange area so that
25 would represent the extent of the treated surface

1 water in the distribution system.

2 Q. And then looking to the far right, from
3 October to February, there's no orange so that tells
4 us that there's no surface water being used during
5 that time frame; is that right?

6 A. Correct. So the orange completely disappears
7 because there's no surface water entering through the
8 canal plants and so the light blue expands and then
9 the yellow, which is other groundwater sources expands
10 from the east. They come together so all of that area
11 has water throughout the year.

12 Q. Great. So let's take a look at Source No. 3,
13 which on our chart on the left is identified in red,
14 and what is this?

15 A. Source No. 3 is the northeast well field. So
16 as the name suggests on the northeast portion of town,
17 we have a number of wells out there. This is also
18 Hueco Bolson water, and those wells are -- are
19 aggregated together to central collection points and
20 put into the distribution system.

21 Q. So approximately or what's the range of the
22 number of wells that are in play in the northeast well
23 field?

24 A. It's about 30 wells.

25 Q. All right. And I notice in the area that's

1 highlighted right now, it says the water is blended
2 into distribution. What does that mean?

3 A. Well, it's to contrast having wells that
4 individually go into the system as opposed to wells
5 that are collected together and then the aggregate of
6 that collection in one central point is put into the
7 system. So in this case, that's what that means is
8 that wells are aggregated together and then it's
9 pumped into the distribution system. A little bit
10 further on the column, you'll see some that go
11 directly into the distribution system.

12 Q. Okay. What's the average TDS, at least in
13 the 2018 time frame, for the northeast well field?

14 A. 470 milligrams per liter.

15 Q. And is that good?

16 A. That's very good.

17 Q. All right. Why don't we look at the map and
18 see how that water sourced from the northeast well
19 field is distributed in El Paso.

20 A. Okay. So you see on the right-hand side, on
21 the October through February time frame, all the red
22 triangle, if you will, is supplied by the northeast
23 well water. Now, during the irrigation season, water
24 is supplied to that area treated surface water, so
25 most all of those northeast wells are turned off and

1 then that becomes, on the March to September side,
2 gray representing the surface water from the Rogers
3 plant.

4 Q. So when surface water is available, as
5 indicated in the March through September time frame,
6 those wells are turned off, and they're not needed?

7 A. Yes. Almost all of them.

8 Q. Okay. So why don't we look at Source No. 4,
9 which is in yellow, and what is that?

10 A. Okay. Source No. 4 is what we refer to
11 generally as the airport well field, and so the
12 airport well field, as the name suggests, are located
13 in the airport, east and west from El Paso
14 International Airport, and these wells are also
15 aggregated together and blended and then put into the
16 distribution system so none of them individually go
17 into the distribution system. So you can see again in
18 the October through February map, the yellow area
19 represents the extent that that water is being
20 supplied during the non-irrigation season. During the
21 irrigation season, most of those wells are turned off,
22 and then that -- that area is supplied through treated
23 surface water.

24 Q. Okay. So similar to what we discussed with
25 the northeast well field, when there's surface water

1 available, those wells are, for the most part, turned
2 off?

3 A. Yes.

4 Q. All right. What's the average TDS for those
5 -- for that water that's sourced from the airport well
6 field?

7 A. 627.

8 Q. And that's good, right?

9 A. Still good, yes.

10 Q. Okay. It's a little higher than from the
11 wells in northeast well field. Do you know why that
12 is?

13 A. Because it is typically further east. So as
14 I mentioned earlier, when you asked me that question
15 about the wells that Mr. Rios described, as you -- as
16 you move towards the east from -- from the mountain,
17 the water quality tends to deteriorate and becomes
18 more salty and so that's why there's a particular
19 difference there.

20 Q. All right. So let's take a look at Source
21 No. 5. This one is delineated by vertical lines, for
22 lack of a better way to describe that. So what is
23 Source No. 5?

24 A. Okay. Source No. 5, geographically they're
25 still in the vicinity of the airport, between the

1 airport and Fort Bliss. The distinction between these
2 wells and the airport wells is that these wells supply
3 water to the Kay Bailey Hutchison desalination plant.

4 Q. Okay. Approximately what's the range of the
5 number of wells that are in the Fort Bliss and airport
6 well fields that supply to Kay Bailey Hutchison?

7 A. So this is about 25.

8 Q. Okay. What is the average TDS, at least in
9 the 2018 time frame, for those wells?

10 A. Okay. So this is a little bit different
11 number. This number that you see there, the 454,
12 that's after the desalination treatment.

13 Q. Okay. That's a great point of clarification.
14 So why don't you describe for us the Kay Bailey
15 Hutchison Desalination Water Treatment Plant,
16 including show us where it is on the map?

17 A. Okay. On the map, if you look at the March
18 through September side and you see the orange area, it
19 says El Paso International Airport. Just to the right
20 of that, there's a little blue dot, says Kay Bailey
21 Hutchison Desalination Plant.

22 Q. All right. Tell us a little about the
23 facility itself.

24 A. The facility is the world's largest inland
25 desalination plant. It is a reverse osmosis plant.

1 That is, it uses the reverse osmosis technology to
2 separate out the salt from the well water.

3 **Q. Is that technology expensive?**

4 A. It is expensive in the sense that you have to
5 pressurize the water to push it through the -- the
6 membranes in order for them to function effectively.

7 **Q. Okay. And once water is processed through**
8 **this desalination plant, is it -- is it drinkable at**
9 **that point?**

10 A. Yes, it is.

11 **Q. Okay. What is the capacity of the Kay Bailey**
12 **Hutchison Plant?**

13 A. 27.5 million gallons per day.

14 **Q. Okay. And using the vertical dashed lines,**
15 **why don't you describe for us the distribution for the**
16 **water that's sourced out of the Kay Bailey Hutchison**
17 **Plant?**

18 A. The -- the distribution of that -- of that
19 water, so during the irrigation season, some of the
20 treatment plant capacity is utilized. So that -- that
21 plant -- I should have explained this when you asked
22 me about the plant, but the production of that plant
23 goes up and down to balance the demand. So when
24 surface water is available, we turn it down. When
25 less surface water is available, we turn it up. So

1 the -- the dash -- the vertical hatched lines that you
2 see there represent the part that's served with the
3 water from the desal plant blended with the Rogers
4 plant. So if you're looking at the March through
5 September map and you see how it's gray and then you
6 have the cross hatch in there, that means that that
7 area is a blend of the Kay Bailey Hutchison desalted
8 water, plus the -- the treated surface water. And
9 then when you go over to the October through February,
10 you can see that that area supplied by the Kay Bailey
11 Hutchison Plant shrinks and is confined -- it shrinks
12 and actually moves to the east to reflect the fact
13 that it's no longer being transported out to the
14 northeast to supply any of that water.

15 **Q. All right. So you mentioned the water that's**
16 **sourced from the Jonathan Rogers Water Treatment**
17 **Plant. Why don't we go ahead and discuss that for a**
18 **minute. And so moving back to the left, that's**
19 **indicated as Source 6 on the chart so why don't you**
20 **describe that for us, please?**

21 **A.** Okay. So, again, following the river down
22 from the canal plant, you come to the next blue dot
23 there, which is the Jonathan Rogers WTP or water
24 treatment plant. So it functions to treat Rio Grande
25 water surface water very similar to the canal plant,

1 except it's a newer plant adds a little bit different
2 type of technology. It is a 60 million gallon per day
3 plant in comparison for the 40 for the
4 Robertson-Umbenhauer.

5 Q. To be clear, the Jonathan Rogers treatment
6 plant treats Rio Grande surface water; is that right?

7 A. Correct.

8 Q. You mentioned there's a little bit of a
9 different type of technology. What did you mean by
10 that?

11 A. The Robertson-Umbenhauer plant is an older
12 plant, so at the -- at the Rogers plant being newer,
13 we use a different type of primary disinfectant, which
14 is called ozone, which is much more effective, but we
15 -- that's a newer technology that we have not been
16 able to retrofit it as yet into the canal plant.

17 Q. Okay. You may have already sufficiently
18 described this, but I just want to make sure we
19 covered it. In terms of how the water is distributed
20 that goes through the Jonathan Rogers Water Treatment
21 Plant, is there anything else you wanted to add about
22 that because we did talk about those gray areas?

23 A. Just to mention the one thing, that the water
24 goes into the system, and there is a pipeline, which
25 you can see on this map, that connects the east side

1 to the northeast, so water can flow all the way from
2 the Rogers plant out into northeast, and that's the
3 reason why we can turn off the wells in the northeast
4 and supply that with the Rogers plant when surface
5 water is available.

6 Q. Is there a name for that pipeline?

7 A. Not a specific name.

8 Q. Okay. That's fine. So let's talk -- flip
9 back to the -- to the left-hand side there, and let's
10 talk about the final source of water. This one is
11 delineated by the horizontal dashed lines. What is
12 this one?

13 A. Okay. So the lower valley means the area of
14 town to the southeast of downtown close to the river,
15 and there are a few wells that remain -- at one point
16 in time, there were many wells in this well field, but
17 now, we have perhaps 15 to 20 wells, and these wells,
18 unlike the other wells that we've talked about, these
19 go directly into the distribution system. So each
20 individual well goes directly into the distribution
21 system.

22 Q. I see.

23 A. They're not aggregated together.

24 Q. Okay. And what is the average TDS for the
25 water out of these wells?

1 A. The average TDS is 862.

2 Q. Okay. And is this the highest of the
3 sources?

4 A. This is the highest of the sources, and so we
5 don't -- don't use these if we can help it.

6 Q. Okay. And similar to the questions before,
7 it appears that from the maps that if there is surface
8 water supply available, that these wells are not used;
9 is that correct?

10 A. That's correct.

11 Q. Okay. So why don't we talk about -- well,
12 let's switch gears for just a second. So,
13 Mr. Balliew, as the president and CEO of El Paso Water
14 and having spent almost 40 years of your career
15 serving the El Paso community, can you describe for us
16 the importance of surface water to the city of El
17 Paso?

18 A. Surface water is very important because it's
19 a renewable source of supply, renewable to the extent
20 that when you have precipitation in northern New
21 Mexico/southern Colorado that gets -- that runs off
22 and gets sent to the Rio Grande Project, that is
23 renewable every year. Of course, that's subject to
24 drought, but it is renewable, as opposed to the
25 groundwater sources that we have available in El Paso,

1 which are not, so especially the Hueco Bolson aquifer.

2 Q. All right. Does El Paso Water, in practice,
3 emphasize the use of surface water over groundwater?

4 A. Yes. So we -- we arrange our system to
5 maximize the utilization of -- of surface water, so we
6 turn off the -- as many Hueco Bolson wells, as many
7 Mesilla Bolson wells as possible to make sure that
8 there is space, if you will, in the system to utilize
9 the surface water to the best of our extent possible.

10 Q. And has that emphasis of surface water over
11 groundwater changed significantly at all the last few
12 decades?

13 A. We -- I would say that we just drew an
14 exclamation point around it, so we're -- we're just
15 more cognizant of the need to maximize surface water
16 and to make sure that we have the ability to control
17 the wells to fully utilize the surface water.

18 Q. And El Paso Water is interested in
19 conservation; is that right?

20 A. Absolutely. We consider ourselves one of the
21 leaders in conservation.

22 Q. So why don't we pull up New Mexico 458, and
23 this appears to -- to me to be a document that's
24 titled, "Digital Model for Simulated Effects of
25 Groundwater Pumping in the Hueco Bolson, El Paso Area,

1 Texas, New Mexico, and Mexico." It's dated back in
2 1975, I believe. Are you familiar with this document,
3 Mr. Balliew?

4 A. Yes, I am.

5 Q. Can you describe for us generally what it is,
6 and then I just have a few questions?

7 A. Okay. So the Texas Water Development Board
8 engaged the U.S. Geological Survey model, and as far
9 as I know for the first time, to simulate the
10 groundwater pumping in the Hueco Bolson aquifer.

11 Q. And did this report, which simulated for the
12 first time the groundwater pumping in the Hueco, did
13 this have any influence to El Paso -- on El Paso Water
14 in El Paso Water's conservation efforts?

15 A. It had a great deal of influence.

16 Q. Can you tell us about that?

17 A. Yeah. Before this report came out, there was
18 a lot of uncertainty about how the different well
19 fields work together so you had some wells here, you
20 had some wells over there, they were, you know,
21 reasonably certain that it was all part of the same
22 aquifer, but we were not sure -- we had no way of
23 telling how pumping in one place effected pumping in
24 another place. So this was the first time that there
25 was a comprehensive look at the whole of the Hueco

1 Bolson, and what it showed was a little bit alarming,
2 that if you continue the rate of withdrawal from the
3 Hueco Bolson at -- at the rate that it was being
4 withdrawn, encompassing the potential population
5 growth in El Paso, then the Hueco Bolson, the
6 freshwater portion of these, would be exhausted much
7 sooner than anybody thought. I don't think anybody
8 even conceived of depletion of the Hueco Bolson until
9 this report came out.

10 **Q. So how did this warning of the depletion rate**
11 **of the Hueco Bolson influence El Paso Water's**
12 **conservation efforts?**

13 A. So El Paso Water had a conservation program
14 before this but very limited. One of the things that
15 -- that we did, which many at the time did not do is
16 we meter all the customers, and we had some public
17 education in terms of -- public education and outreach
18 in terms of water conservation, but it was not until
19 this report came out that we really started doing
20 thing. We adjusted our rate system. So before this
21 report came out, we had a flat rate, and that is you
22 -- you pay the same amount of water whether you use a
23 lot or a little on a per-volume basis. So we started
24 increasing watts. So for the additional water use,
25 let's say, that was in the summertime for irrigation,

1 customers would pay more for them. We redouble our
2 education efforts and then we started -- we greatly
3 expanded our reclaimed water so before this came out
4 about 1959 or so, we supplied one golf course with
5 treated effluent from one of our wastewater treatment
6 plants. After this report came out, we embarked upon
7 what became the Fred Hervey plant where we're taking
8 wastewater, treating it all the way to drinking water
9 quality standards, and then injecting that back into
10 the Hueco Bolson for recharge.

11 Q. Okay. Now, anything --

12 MS. BARFIELD: You can go ahead and take
13 that down.

14 Q. (BY MS. BARFIELD) In addition to the report
15 that you just talked about, was there anything else
16 that precipitated or fostered the conservation efforts
17 for El Paso Water?

18 A. I think there were other reports that were
19 done about the same -- following this over a period of
20 time up through the '90s when there was similar
21 conclusions that were drawn.

22 Q. Let's look at one more. This one is New
23 Mexico 1672. This appears to be a report in the 1990
24 time frame by the Texas Water Development Board. Have
25 you seen this report before, Mr. Balliew?

1 A. Yes. I've seen this one.

2 **Q. Okay. What is this one?**

3 A. So this was another report that the Texas
4 Water Development Board prepared by themselves, and so
5 it differs a little bit from the previous one that we
6 looked at in that this encompasses more groundwater
7 resources in El Paso County. So the previous report
8 was just focusing on the Hueco Bolson. This focuses
9 on the Hueco Bolson plus the Mesilla and the Rio
10 Grande alluvium, as well.

11 **Q. Okay. So what about this report, if**
12 **anything, fostered even more conservation efforts on**
13 **behalf of El Paso Water?**

14 A. So this report, again, had a similar
15 conclusion where they look at how much water is being
16 used by each individual person and then you look at a
17 population projection going forward into the future
18 and so then you can see that in the future, if
19 everybody is using the same amount of water that they
20 were using in the past, then you have tremendous
21 pressure on the groundwater sources of supply that we
22 couldn't keep up so we needed additional sources of
23 supply. So, again this, we embarked upon other what
24 I'll put into a category of water conservation
25 measures, which was the purple pipe system, where we

1 made available treated effluent primarily for
2 irrigation purposes from the different wastewater
3 treatment plants.

4 **Q. Now, did the conservation efforts that you've**
5 **been describing to us result in any per capita**
6 **consumption changes?**

7 A. Yes. So in the early '90s, every person in
8 the system was using more than 200 gallons per day,
9 and we refer to that as gallons per capita per day,
10 and we've been able to drop that significantly where,
11 now, we're at approximately 125, 126 gallons per
12 person per day.

13 **Q. Okay. Now, is one of the ways that El Paso**
14 **Water conserves water, is it by reusing wastewater**
15 **discharges?**

16 A. Yes. And we do that in -- in two areas. So
17 number one area is what we refer to as the purple pipe
18 project. That's where we take water from the
19 wastewater treatment plant so it would normally be
20 discharged into the river. We provide a little bit
21 more treatment, and then we have a separate network of
22 pipes, pump stations, and reservoirs where we
23 distribute that to typically large irrigation
24 customers like parks and school playgrounds, that sort
25 of thing, golf courses, and then, also, the Fred

1 Hervey plant, as I mentioned, where we take that same
2 starting point, the wastewater, but in this case, we
3 treat it all the way to where it meets drinking water
4 quality standards and we inject it back into the Hueco
5 Bolson.

6 Q. All right. Now, if you can estimate for us,
7 how much of El Paso's wastewater would you estimate is
8 based upon groundwater supplies versus surface water
9 supplies?

10 A. About half of it.

11 Q. All right. Does El Paso have any plans to
12 increase its wastewater -- wastewater reuse in the
13 future?

14 A. Yes. So we do not anticipate that we will
15 expand the purple pipe project at all. It pretty much
16 has reached the end of its cost effectiveness, because
17 as you -- as you get further and further away from the
18 treatment plant, each incremental segment of the
19 pipeline costs more and then as the customers get
20 further apart from each other, it costs more to serve
21 each individual customer. Also, the technology of
22 treatment is much better now than it was in 1980 when
23 the Fred Hervey plant was constructed so we are going
24 to take that same purple pipe water, treat it through
25 a modern four-step treatment system, and put that

1 directly into the potable distribution system.

2 Q. All right. How much of its wastewater do you
3 think El Paso Water will reuse in the future?

4 A. Okay. So of the -- of the wastewater that --
5 that we discharge, we're going to use what -- what I
6 would say is a little bit more than we're using right
7 now. The reason I say that is because we have certain
8 obligations that we have to discharge that water
9 either into -- the effluent, that is, into the bed of
10 the river or into the El Paso County Water Improvement
11 District No. 1 system depending on the time of year.

12 Q. All right. Is there anything else that we
13 haven't already talked about as it relates to
14 conservation efforts by El Paso Water that you haven't
15 told us about yet?

16 A. The most important water conservation tool
17 that -- that we have is rate increases, and as we
18 embark upon regular program of annual rate increases,
19 as the -- as the unit price of the water goes up, the
20 consumption of the water does go down. So that's a
21 very effective tool that we utilize, as well.

22 Q. Okay. Are you familiar with the matter El
23 Paso versus Reynolds?

24 A. I am.

25 Q. Can you describe what your familiarity is

1 **with that matter?**

2 A. Okay. So back in the '80s, when I started
3 with the -- with El Paso Water, there was another
4 period of litigation that was taking place. So at
5 that point in time, El Paso had a plan and approached
6 the State of New Mexico, filed permits with the state
7 engineer's office to drill wells in the State of New
8 Mexico and bring that groundwater into El Paso. The
9 state engineer at the time was Steve Reynolds so
10 that's where the name comes from.

11 **Q. And if you know, how did the State of New**
12 **Mexico react to the permits that were filed by El**
13 **Paso?**

14 A. So the State of New Mexico rejected the
15 permits, and there was a lot of litigation over a
16 period of many years in state court and in federal
17 court where New Mexico was vigorously defending their
18 water resources, and ultimately, the parties decided
19 just to end the litigation without obtaining any of
20 the water.

21 **Q. Did the ending of that litigation, did it**
22 **foster additional conservation efforts by El Paso**
23 **Water?**

24 A. It did foster additional conservation and
25 some other efforts. So the general principle that --

1 that was communicated to me at the ending of that
2 period of litigation was that El Paso needed to
3 exhaust all the opportunities and resources available
4 to it locally before we went to New Mexico and tried
5 to get water. So as a result of that, there was more
6 conservation, and we started down the process that
7 ultimately led to the Kay Bailey Hutchison
8 desalination plant.

9 Q. Okay. We're going to move sections, but I
10 wanted to clarify one thing before we moved onto
11 sections. When we were talking about the different
12 TDS levels in the fields of, like, the Canutillo well
13 field versus others, you had talked about -- and
14 especially as compared to Mr. Rios' testimony, you had
15 talked about well depth, but is there also a
16 difference in TDS or water quality related to the
17 valley that the wells are located in? So with that
18 preface, what valley are the Canutillo wells located
19 in?

20 A. The Canutillo wells are located in the
21 Mesilla Valley, so that's generally north of El Paso
22 along the Rio Grande.

23 Q. Okay. And does the location of those
24 Canutillo wells in the Mesilla Valley have any effect
25 on lower or higher TDS?

1 A. Yes. So if we look just at the Mesilla
2 Bolson, as you go south from Canutillo, the water
3 becomes increasingly brackish. So by the time you
4 reach the populated portion of El Paso, the water is
5 very brackish. So the freshwater extends from the
6 Canutillo well field going north so that's in kind of
7 the north/south direction. In the east/west
8 direction, you have the mountain on one side that kind
9 of constrains the Bolson and then to the -- to the
10 west, you get back into New Mexico relatively quickly.

11 **Q. Go ahead. I didn't mean to interrupt you.**

12 A. And then also at depth. So at the shallow
13 portion, it's very salty. We have an intermediate
14 portion less so and then you have a deep portion that
15 has, like, 200 milligrams per liter TDS. Very low.

16 **Q. Okay. And it's a different aquifer, right?**

17 A. Correct.

18 **Q. Okay. All right. So let's switch gears.**

19 **MS. BARFIELD:** We can take this down,
20 please, and let's look at Balliew John Demo 1.

21 **Q. (BY MS. BARFIELD) Now, this appears to be a**
22 **May 31st, 2019, expert report of Dr. Sunding that's**
23 **shown here for demonstrative purposes only. Have you**
24 **seen this before?**

25 A. I have seen this.

1 **Q. And have you reviewed this report?**

2 A. I have reviewed it, but I have not thoroughly
3 studied it.

4 **Q. Okay. Can you tell us whatever your limited**
5 **understanding is of the purpose of this report?**

6 **MR. KOPP:** Your Honor, before
7 Mr. Balliew gets into this testimony, I'm just going
8 to lodge an objection to this. Mr. Balliew is not the
9 author of this report, and we don't believe he can
10 authenticate it. In addition, even if this is being
11 offered for demonstrative purposes, we believe that
12 without the author of the report, Dr. Sunding, here to
13 testify to its contents, that it's not appropriate to
14 use even as a demonstrative exhibit at this time.

15 **MS. BARFIELD:** If I could respond, Your
16 Honor.

17 **JUDGE MELLOY:** You may.

18 **MS. BARFIELD:** Thank you. As
19 Mr. Wechsler stated yesterday, demonstrative exhibits
20 have no evidentiary value outside of what is actually
21 being said by the witness. The witness is simply
22 using this report as context. He is certainly not
23 going to comment or opine on any of the opinions that
24 Dr. Sunding puts into the report, and if you'll let me
25 just continue and lay the foundation, you'll see that

1 we're just really going to be looking at a few of his
2 graphics.

3 **JUDGE MELLOY:** All right. Well, go
4 ahead, but, Mr. Kopp, if you want to lay further
5 objection as we get through this, you're free to do
6 so.

7 Go ahead, Ms. Barfield.

8 **Q. (BY MS. BARFIELD)** I think we had a question
9 pending. Mr. Balliew, if you could just tell us what
10 your very general understanding is of the purpose of
11 this report?

12 A. The purpose of this report was to document
13 the effects of the reduced surface water availability
14 on Texas and El Paso particularly.

15 **Q. Who is David Sunding with The Brattle Group,**
16 **if you know?**

17 A. I believe David Sunding is an economist
18 associated with Berkeley University.

19 **Q. What is your particular involvement with**
20 **David Sunding and The Brattle Group, if any?**

21 A. Mr. Sunding came and requested some
22 information from us on what projects we had done
23 specifically to deal with, what I'll refer to as the
24 uncertainties in surface water delivered.

25 **Q. Okay.**

1 **MS. BARFIELD:** Could we flip forward to
2 Figure No. 7? Peder, that is on, I think, PDF Page
3 29. And could we focus just on the figure itself
4 without looking at the text?

5 **Q. (BY MS. BARFIELD)** All right. Are you
6 familiar with this figure?

7 A. Yes.

8 **Q.** Is this a copy of Page 2 of 773 that we just
9 discussed in detail?

10 A. Yes, it is.

11 **Q.** Did you provide what we reviewed as Texas 773
12 to Dr. Sunding and the Brattle group?

13 A. Yes, I did.

14 **Q.** I notice here at the bottom within
15 Dr. Sunding's report, it says, "Source, the City of El
16 Paso, El Paso Water Chemical Analysis, City Water."
17 That source is the source that we just discussed in
18 great detail; is that correct?

19 A. That's correct.

20 **Q.** Could we also look at Figure 8 in the Brattle
21 report, please, and I think that is on PDF 30. This
22 appears to be a table that's entitled, "EPWU
23 Production By Source Monthly Averages from 1985 to
24 2012." Have you seen this before?

25 A. Yes. This is one of the things that we

1 prepared for Dr. Sunding.

2 Q. And when you say "we prepared," what do you
3 mean?

4 A. So this is a chart that is compiled from
5 something that we refer to as the monthly pumpage and
6 operation report. So in this pumpage and operation
7 report by water source, we document every day how much
8 water comes from that particular source, and so this
9 aggregates those daily values into monthly values, and
10 the purpose of this is just to show two things.

11 Number one is the seasonal variation in water demand.
12 So in the month of January, December, let's say colder
13 winter months, you have lower demand for water. In
14 the hot summer months like June or July, that demand
15 goes significantly higher. That's one thing that it
16 shows. The second thing that it shows is how the
17 surface water and groundwater work together. So you
18 can see that the -- that the groundwater supplied into
19 the system is relatively constant, but then the
20 surface water, the Rio Grande water, that is, makes up
21 the difference between the groundwater and the total
22 demand for that particular month.

23 Q. And you mentioned that this report -- figure,
24 rather, is based upon monthly pumpage and operation
25 reports. Did I get that right?

1 A. Yes.

2 Q. Okay. And who prepared the monthly pumpage
3 and operation reports that is the data source for this
4 particular figure?

5 A. The monthly pumpage and operation report is
6 done by the water production section of the water
7 utility headed currently by Jesus Acosta.

8 Q. And Jesus Acosta then prepares these reports
9 or the monthly pumpage and operation reports along
10 with the folks in his --

11 A. Section.

12 Q. -- section -- along with the folks in his
13 section, but he doesn't pursue it to your direction
14 and under your authority and supervisory control; is
15 that correct?

16 A. Correct.

17 Q. Okay. Why don't we look at Figure 16 in The
18 Brattle report, please, and this is on PDF Page 50.
19 And then just focusing on Figure 16, are you familiar
20 with this table?

21 A. Yes.

22 Q. Okay. And I see at the bottom under sources,
23 it -- it lists a source. What is the source that's
24 listed?

25 A. El Paso Water expenditures due to decreased

1 surface water allocation October 2017, Page 165.

2 Q. We're going to talk about that in a few
3 minutes, but generally speaking, what is that source
4 for the data on Figure 16?

5 A. So at Dr. Sunding's request, we created a
6 report, including myself, Scott Reinert, and Fernando
7 Rico, created a report to talk about the -- to
8 describe the added facilities that we did to
9 compensate for the uncertainty in the surface water
10 supply.

11 Q. All right. And what does Figure 16 depict
12 generally?

13 A. So, again, the data that is used is from the
14 monthly pumpage and operation report. In this case,
15 it's aggregated by year, so each bar there represents
16 a particular year and so you can see it not only
17 describes how much water is supplied during the course
18 of the year but where it comes from. So if we look at
19 the 2016 bar, for example, we have the medium blue
20 representing the Rio Grande, the surface water. We
21 have the gray bar representing the Mesilla Bolson
22 groundwater, the dark blue representing the Hueco
23 Bolson groundwater, and then you have the light blue,
24 which is the Kay Bailey Hutchison Plant. Now, as I
25 mentioned before when we were talking about that, the

1 Kay Bailey Hutchison plant is groundwater and it's
2 also coming from the Hueco Bolson aquifer, but it's
3 just the brackish portion. It's derived from the
4 brackish portion of the aquifer.

5 Q. Okay. So at least from 1985 through 2016, as
6 depicted on Figure 16, this table shows the
7 differences in the total volume of water sourced from
8 the Rio Grande during those years; is that right?

9 A. Yes.

10 Q. And then from the two aquifers, as well as
11 Kay Bailey Hutchison?

12 A. Yes.

13 MS. BARFIELD: We're going to move onto
14 Texas 0091. Before I do, Your Honor, I would move to
15 admit for demonstrative purposes only Balliew Demo No.
16 1.

17 MR. KOPP: Your Honor, we have no
18 objection to the specific images Ms. Barfield shows
19 you, but I would renew my objection that the entire
20 report not be entered as a demonstrative exhibit.
21 This report contains a multitude of information
22 outside of the figures that Mr. Balliew testified to
23 that we don't think is appropriate for admission at
24 this time.

25 MS. BARFIELD: Your Honor, you're muted.

1 Still can't hear you.

2 MR. DUBOIS: You're muted, Your Honor.

3 MS. BARFIELD: There we go.

4 JUDGE MELLOY: I was going to say, I
5 will sustain the objection and admit the specific
6 pages. Do you have those numbers available, Ms.
7 Barfield?

8 MS. BARFIELD: Yes, I do. They are, of
9 course, the cover page and then we have Figure 7 on
10 PDF Page 29. We have Figure 8 on PDF Page 30, and we
11 have Figure 16 on PDF Page 50.

12 JUDGE MELLOY: All right. Those pages
13 will be admitted. The rest of the exhibit will not
14 be. And that's for demonstrative purposes only. All
15 right. You may proceed.

16 MS. BARFIELD: Thank you, Your Honor.

17 Q. (BY MS. BARFIELD) Let's take a look at Texas
18 0091. Mr. Balliew, is this the document that's
19 referenced that we just discussed at the source of
20 Figure 16 from the Brattle report?

21 A. Yes, it is.

22 Q. Okay. Have you seen this document before?

23 A. Yes.

24 Q. And what is this document?

25 A. So this is the document that was prepared by

1 myself, Scott Reinert, and Fernando Rico to document
2 expenditures related to the decreased surface water
3 availability.

4 Q. And -- and, again, you -- you told us
5 earlier, but if you could remind us, who is
6 Mr. Reinert?

7 A. Scott Reinert is our water resources manager,
8 and Fernando Rico was the vice president -- or the
9 chief -- pardon me, chief operations officer at the
10 time. He has subsequently retired, but Scott is still
11 with us.

12 Q. Okay. And recalling the organizational
13 structure that we discussed at the beginning of your
14 testimony today, do you supervise both of those
15 individuals?

16 A. Yes, I do.

17 Q. Okay. And so their work on this report were
18 performed pursuant to your direction and under your
19 supervision, correct?

20 A. Yes. That's correct.

21 Q. Okay. They were primary authors on the
22 report?

23 A. Yes.

24 Q. Were you also a primary author on this
25 report?

1 A. I was.

2 Q. All right. Why was the report prepared, if
3 there's any additional information you want to give
4 us, other than you were providing information to
5 Dr. Sunding?

6 A. We were providing information to Dr. Sunding
7 on some specific activities that we had undertaken in
8 response to reduced surface water availability, and it
9 was limited in its scope. This was not to really talk
10 about drought or water conservation or other things of
11 that nature, but specifically to certain facilities
12 and activities that we had done.

13 Q. All right. Let's talk about the components
14 of the report. First of all, how is it generally
15 organized?

16 A. So it's generally organized that you have a
17 -- a contents and there's nine specific projects that
18 are listed in there and then there's a summary of the
19 ten projects.

20 Q. Okay. And of the nine specific projects that
21 are listed here, and those are tabbed as Items 1
22 through 9, do those represent all of the projects
23 undertaken by El Paso Water Utilities over the course
24 of the last few decades to address surface water
25 issues or were there choices made in which items you

1 **included in this report?**

2 A. There were choices made that resulted in us
3 taking a subset of everything that we did. So, for
4 example --

5 **MR. KOPP:** Your Honor -- sorry,
6 Mr. Balliew, but, Your Honor, I'd like to object to
7 any further testimony on this exhibit until it's
8 admitted.

9 **MS. BARFIELD:** Your Honor, I move to
10 admit the report.

11 **JUDGE MELLOY:** All right.

12 **MR. KOPP:** And we do object to the
13 admission of this report, and I think, Your Honor,
14 this goes to maybe a disagreement between the parties
15 concerning the Trial Management Order's ruling on
16 bifurcation. As, I think, it's already been made
17 clear, this report contains nothing but a list of
18 expenses that El Paso Water alleges it has incurred.
19 As Mr. Balliew just testified, it does not contain any
20 information about drought or population growth, so we
21 don't think there's anything in here that's relevant
22 to the issues of causation or liability. This really
23 just seems to be relevant to issues of quantification
24 of damages, which we had understood were reserved to
25 the next phase of trial.

1 **JUDGE MELLOY:** What's your position, Ms.
2 Barfield?

3 **MS. BARFIELD:** Your Honor, in your June
4 4th, 2021, order, at that time you were addressing a
5 request for clarification of the bifurcation order
6 that you originally included in the Trial Management
7 Order back in April. So the Trial Management Order
8 back in April had read, and I'm paraphrasing, that the
9 Phase 1 trial would be liability and injury. New
10 Mexico and perhaps other parties requested
11 clarification, and your clarification, Your Honor, and
12 I'm reading directly from the order at Paragraph 3
13 states that, "The purpose of the trial -- this phase
14 of the trial will be limited to liability and whether
15 Texas, as the plaintiff, and New Mexico, as the
16 counter claimant, have sustained more than de minimus
17 damages." What we are offering here today with
18 Mr. Balliew's testimony is a discussion, which we
19 haven't started yet, of certain projects that were
20 undergone by El Paso Water to address surface water
21 insufficiencies. There are costs associated with the
22 projects that were undergone. These are factual
23 issues. He is not going to offer an opinion as to
24 whether or not the costs associated with these
25 projects that we're going to discuss ultimately would

1 be from a quantitative perspective, included in a
2 damages analysis. That's for Phase 2. That's for
3 Dr. Sunding and The Brattle Group. What we're talking
4 about now is just the facts, the hard facts of they
5 had some projects, they did the projects, they
6 completed the projects, and it cost a certain amount
7 of money. That's what we're offering today, Your
8 Honor.

9 **JUDGE MELLOY:** Well, I did indicate that
10 it would be the responsibility of Texas, as part of
11 the case in chief, and New Mexico on its counterclaim
12 to show that they sustained some damages that were
13 more than de minimus. So for that limited purpose
14 only, I will admit the exhibit. I mean, I don't want
15 to spend too much time on it because -- for two
16 reasons. One is I don't know -- I don't know if these
17 are even recoverable by Texas as part of their case.
18 It's the El Paso Water District, and so that's a whole
19 issue that will have to be separately litigated in the
20 second phase of the trial as to what items are --
21 Texas may recover, assuming that they're successful on
22 liability. And the other -- other reason is I don't,
23 at this phase of the trial, want to get down into the
24 weeds, so to speak, as to specific items of damages.
25 So I'll allow some limited testimony just to show that

1 there are damages, and I will admit the exhibit.

2 Thank you.

3 **MS. BARFIELD:** Thank you, Your Honor.

4 **MR. KOPP:** Sorry, Your Honor. Could I
5 ask for a point of clarification on that ruling?

6 **JUDGE MELLOY:** Go ahead.

7 **MR. KOPP:** Thank you, Your Honor. As I
8 understand the ruling you just made, does that mean
9 that we should reserve our evidence on the
10 appropriateness of the charges listed here to the next
11 phase of trial?

12 **JUDGE MELLOY:** Yes.

13 **MR. KOPP:** Okay. Thank you, Your Honor.

14 **Q. (BY MS. BARFIELD)** Okay. So let's walk
15 through these and get a little understanding of the
16 types of projects undergone --

17 **JUDGE MELLOY:** Let me go back a second
18 here. I want to emphasize, at this point, I'm not
19 even making any indication that these are recoverable,
20 even assuming that they are appropriate, reasonable,
21 were, in fact, incurred. I mean, this is something
22 that's a long way down the road as to what damages are
23 -- are recoverable by Texas on its claim or New Mexico
24 on its counterclaim, assuming either party is
25 successful on the liability phase. So as I said, I

1 will allow some limited testimony just to show that
2 there are damages.

3 **MS. BARFIELD:** Thank you, Your Honor.
4 And if -- if I may, just to clarify the purpose of the
5 testimony, as well, Mr. Kopp Is correct that David
6 Sunding does talk about some of these things in his
7 report. We're not going to address that with
8 Mr. Balliew's testimony here today. The purpose is to
9 hear from Mr. Balliew, who is the president and CEO,
10 and who authorized these projects. He's going to tell
11 us about the projects. We're going to simply ask him
12 how much it cost, and we're not going to go into
13 further detail than that. But I want to make sure
14 that the foundation is laid for Mr. -- for Dr. Sunding
15 to rely on later and so we don't have to bring him
16 back again in Phase 2.

17 **JUDGE MELLOY:** Go ahead.

18 **MS. BARFIELD:** Thank you so much, Your
19 Honor.

20 **Q. (BY MS. BARFIELD)** So let's walk through,
21 let's talk about the first item. Turning to Item No.
22 1, this is labeled, "Drilling New Upper Valley Wells."
23 Could you describe the project for Item 1?

24 **A.** Okay. So Item 1, we drilled two wells, a
25 deep well and an intermediate well in the Canutillo

1 well field to provide additional water that we felt
2 was necessary.

3 **Q. Why did El Paso Water feel that it was**
4 **necessary to drill these two additional wells?**

5 A. Because of the reduced availability of
6 surface water. The water, if you remember from
7 looking at the map, the light blue water needs to
8 expand down into the central part of town when surface
9 water is not available, and we did not think that we
10 had a sufficient number of wells to make that water
11 available so we needed to drill two additional wells
12 for that purpose.

13 **Q. What was the total cost for El Paso Water to**
14 **drill these wells?**

15 A. The total capital cost, \$1,675,802.

16 **Q. And then there's also operation and**
17 **maintenance costs; is that correct?**

18 A. Yes. Of \$209,516.29.

19 **Q. For a grand total of?**

20 A. \$1,885,318.

21 **Q. Okay. And I note with each of the sections**
22 **for each of the item numbers, there are some attached**
23 **summaries and invoices of -- and such of that nature;**
24 **is that correct?**

25 A. Yes. To try to document the cost that's

1 shown there.

2 Q. Okay. And I also note that there are several
3 kind of inserts that state, well, the invoices are
4 located in a separate box or aren't included within
5 this total of 176 pages. So what's the purpose of
6 that?

7 A. To reduce the volume of information in the
8 report. So if we had some summary, let's say, like a
9 bid tabulation that talked about how much it's going
10 to cost for the wells, that wasn't included -- that
11 was included, but we have to backup all the invoices
12 that would lead up to that number are in those boxes.

13 Q. Okay. And what actions did you personally
14 take, if any, to ensure the reliability of the
15 spreadsheets that -- that tally the invoices?

16 A. So I talked to our people in our accounting
17 and purchasing department and they assured me that
18 that ties together with the costs that were actually
19 proposed by the driller in this case and then if there
20 were quantity adjustments, those were reflected in
21 those invoices.

22 Q. Okay. And the actions that you just
23 described, they were -- they were performed pursuant
24 to your direction and under your supervision, the
25 compilation of the spreadsheets; is that right?

1 A. That's correct.

2 Q. Okay. Does the process that you just
3 described to us apply to each of these enumerated nine
4 items, not just number one, but to all of them?

5 A. That is correct, all of them.

6 Q. Okay. And the actual work that is described
7 in Item No. 1, the drilling of the two upper valley
8 wells, would El Paso Water have decided to drill these
9 wells but for the insecurity in the surface water
10 supplies that you just described to us?

11 A. We would not have done that.

12 Q. Okay. And how are you able to say that El
13 Paso Water made this choice on the basis of
14 insufficiency of surface water supplies as opposed to
15 any other reason?

16 A. Well, in -- in looking at the demand and
17 comparing the demand against the availability, both
18 the availability of surface water and the availability
19 of groundwater, and noting that the availability of
20 groundwater was decreasing, we had to raise the
21 availability of groundwater.

22 Q. Okay. Let's talk about Item No. 2. It's
23 labeled, "Transmission Line from Canutillo Well
24 Field." Can you describe the Item 2 project for us?

25 A. So for the two wells that we talked about,

1 that water has to be transmitted to the upper valley
2 water treatment plant for the arsenic treatment and
3 then from that point, it's delivered on down and
4 ultimately into the distribution system. So this is
5 the cost of that -- that pipeline, which we divided up
6 into three different phases.

7 Q. What was the total cost or the grand total
8 cost, rather, for building this transmission line?

9 A. \$11,477,291.

10 Q. Okay. And would El Paso Water have decided
11 to put in this new transmission line if it weren't for
12 the insecurity in the surface water supply that you've
13 described to us?

14 A. We would not have done that.

15 Q. Okay. And let's talk about Item No. 3. If
16 you could describe the Item No. 3 project, please.

17 A. I think this is No. 4. Did we skip one?

18 Q. It should start on Page 51 of 76.

19 A. There we go. Okay. So the -- the canal
20 plant -- the same canal plant, the Rogers --
21 Robertson-Umbenhauer plant that we talked about, in
22 order to deal with certain changes due to the
23 uncertainty of surface water supplies, we had to make
24 some modifications to the plant. So we talked --
25 we've talked so far about the -- the change in the

1 quantity of water, but in addition to the change in
2 quantity, there were quality issues, as well, and the
3 higher -- the quality issues resulted in higher silt
4 load, which is the fine particles in the -- on the
5 water, and then in some additional microbial content
6 that we had to deal with. So we put in a UV system to
7 deal with the microbial component, and then we did not
8 specifically have to add a granular activated carbon
9 filtration system, which we already had, but we had to
10 change out that granular activated carbon media more
11 frequently to compensate.

12 **Q. And what did this work accomplish?**

13 A. So this -- this allowed us to continue
14 utilizing that water even at the reduced level that we
15 had with the increased microbial load and the
16 increased silt, we were able to deal with all those
17 things and continue to operate the canal plant.

18 **Q. Okay. What was the grand total cost for the**
19 **work you just described to us for Item No. 3?**

20 A. \$4,489,616.

21 **Q. Item No. 4, can you describe that work for**
22 **us, please, or that project rather?**

23 A. Okay.

24 **MR. KOPP:** Your Honor, sorry to
25 interrupt. Before we go any farther, I'd like to

1 lodge a foundation objection here. I don't believe
2 Mr. Balliew has testified that there have been any
3 shortages of surface water to the city of El Paso.

4 **MS. BARFIELD:** You're on mute, Your
5 Honor. I'm sorry.

6 **JUDGE MELLOY:** I seem to be having some
7 problems with my spacer bar here. The -- I'm going to
8 overrule that objection; however, let me go back to my
9 prior ruling and I may have spoken too quickly,
10 Mr. Kopp. As I understand, part of the testimony here
11 today, Ms. Barfield, is that you want to, in essence,
12 lay the foundation for the accuracy of this exhibit
13 because it's going to be used by your expert, Dr. --
14 I'm sorry. What was his name?

15 **MS. BARFIELD:** Dr. Sunding.

16 **JUDGE MELLOY:** Dr. Sunding in the live
17 phase of the trial, and you don't want to bring
18 Mr. Balliew back to lay foundation at that time; is
19 that correct?

20 **MS. BARFIELD:** Well, that is part of it,
21 Your Honor. The other part is that these are actions
22 and projects undertaken by El Paso Water that actually
23 happened that just have an associated cost.

24 **JUDGE MELLOY:** I understand that, but I
25 guess what I'm getting at is if -- if Mr. Balliew

1 isn't going to be coming back and this is -- and your
2 intent is that this report would form a part of the
3 basis for the expert report of Dr. Sunding, then I
4 think -- I mean, you may have to cross-examine him
5 about it, Mr. Kopp, because this may be incorporated
6 into the expert report.

7 **MR. KOPP:** Understood, Your Honor.
8 Thank you.

9 **JUDGE MELLOY:** You know, this -- this
10 might -- ask your last question, and then after we
11 finish with this item, we'll take a break, Ms.
12 Barfield.

13 **MS. BARFIELD:** Thank you, Your Honor.

14 **Q. (BY MS. BARFIELD) And I think the last**
15 **question was on Item No. 4 for Mr. Balliew, if you**
16 **could just please describe the Item 4 project for us.**

17 **A.** It's a similar project to the No. 3 project,
18 except this is the Rogers plant instead of the canal
19 plant, and at the Rogers plant, we did a different --
20 we did not use the UV disinfection because for a large
21 plant like this, it would have been very expensive, so
22 we utilized something called chlorine dioxide. It's a
23 different disinfection to deal with the increased
24 microbial load, but then we also had the same need to
25 change out the granular activated carbon more

1 frequently, and then we had something called the raw
2 water channel. So the raw water channel goes from the
3 canal where we take water from the El Paso County
4 Water Improvement District to the plant itself, and
5 that canal, being an earth-lined tract, had
6 accumulated silt resulting in further cleanup that we
7 had to do. So we had -- we felt it prudent to line
8 that with concrete. And then in addition, once the
9 water goes into the series of five ponds that we have
10 at the plant, that additional silt mode that was
11 coming in, we had to deal with at the end of the
12 season excavate it out and dispose of. So those costs
13 are shown here.

14 **Q. Okay. What is the total cost for the work**
15 **you just described?**

16 **A. \$9,458,625.**

17 **MS. BARFIELD:** Okay. Would Your Honor
18 like to take a break at this point before we move on
19 to the next item?

20 **JUDGE MELLOY:** If you're ready to move
21 on, let's break until 3:15 our time.

22 **MS. BARFIELD:** Thank you, Your Honor.

23 **JUDGE MELLOY:** Thank you, everyone.

24 (Recess.)

25 **JUDGE MELLOY:** All right. Looks like

1 we're ready to resume. Ms. Barfield, you may
2 continue.

3 **MS. BARFIELD:** Thank you, Your Honor.

4 **Q. (BY MS. BARFIELD)** Welcome back, Mr. Balliew.
5 I think we were about to get a little information
6 regarding Item No. 5 in the October, 2017, report
7 prepared by El Paso Water. Could you please describe
8 the Item No. 5 project?

9 A. So Item No. 5, the concept here was to take
10 11 of the lower valley wells. We talked about this a
11 little bit when we went over the map. These 11 wells,
12 the TDS had already gone over the drinking water
13 standard, but we could put in an individual well head
14 on each one of them, so this represents the cost of
15 doing 11 of those wells adding the reverse osmosis
16 system to that.

17 **Q. All right. Why did the wells require**
18 **rehabilitation?**

19 A. The TDS was more than a thousand for each --
20 each well so we were unable to utilize them. These
21 wells go directly into the distribution system, so we
22 need to keep the water quality under a thousand to
23 prevent customer complaints so each well had to be
24 treated individually.

25 **Q. Okay. And setting aside the detail of the**

1 numbers, what is the total cost for this project that
2 you've just described to us in Item No. 5?

3 A. \$8,060,000.

4 Q. Okay. Would El Paso Water have decided to
5 rehabilitate those lower valley wells and install the
6 reverse osmosis well heads if it weren't for the
7 insecurity in the surface water supply?

8 A. We would not.

9 Q. Let's look at Item No. 6, and if you could,
10 please describe that project for us?

11 A. Item No. 6 refers to the replacement of the
12 Paisano line. So the Paisano in general starts at the
13 Canutillo well field and goes into central El Paso to
14 the Sunset Reservoir. The other end of that system is
15 the canal plant. So the canal plant goes up to the
16 Sunset Reservoir, so that's the point where the
17 Canutillo well field water and the surface water
18 leaked, and there was a 36-inch line existing, and it
19 could not convey enough water, again, to deal with the
20 reduced amount of surface water it had to deal with so
21 we replaced it with a larger 48-inch diameter water
22 line to increase the production of water coming from
23 the Canutillo well field to central part of town.

24 Q. What was the total cost for this project?

25 A. Well, the total cost was 18 plus million

1 dollars, but for the purposes of this report, the only
2 thing that we did was to calculate the difference
3 between the 36-inch and the 48 and so that incremental
4 difference is \$3,122,385.

5 Q. Okay. I understand. And would El Paso Water
6 have decided to build this larger water line that
7 you've described, absent the insecurity in the surface
8 water supply from the Rio Grande?

9 A. No, we would not.

10 Q. Okay. Let's go ahead and look at Item No. 7.
11 If you could please describe the Item No. 7 project
12 for us.

13 A. Item No. 7 is -- refers to incremental
14 increase in the production of the Kay Bailey Hutchison
15 desalination plant, so of that 27.5 million gallon per
16 day capacity that we talked about, we felt that 4
17 million gallons per day of that capacity was necessary
18 to offset surface water. So the Kay Bailey Hutchison
19 plant has more than one purpose. There's a drought
20 purpose. There's also the purpose of reducing the --
21 the infiltration of brackish water, but for the
22 purposes of the additional supply, we zeroed down to
23 only 4 million gallons per day of that to replace the
24 surface water.

25 Q. What's the total cost to operate the Kay

1 **Bailey Hutchison plant?**

2 A. The total cost of operation for this 4
3 million gallon per day increment, \$14,795,429.

4 Q. Okay. Would El Paso Water have decided to
5 forego construction of Kay Bailey Hutchison but for
6 the insecurity in surface water supply of the Rio
7 Grande?

8 A. We would not.

9 Q. All right. Let's look at Item No. 8. Could
10 you please describe the Item No. 8 project for us?

11 A. Item No. 8 refers to well maintenance and
12 rehabilitation. So the way that we used to do
13 maintenance and rehabilitation for wells was on a
14 corrective basis, so we would wait until there was a
15 problem, then we would do the maintenance to correct
16 that problem, but what that left us in is a position
17 where we would have maybe multiple wells out of
18 service, and because of the uncertainty in the surface
19 water delivery, we needed to be able to call on these
20 wells in an instant, so we switched from a corrective
21 maintenance program to a preventative maintenance
22 program. So we went through sequentially well by well
23 doing preventative maintenance to make sure that all
24 the wells were -- as many as possible were available
25 to start at a moment's notice.

1 Q. All right. So the expenses that are
2 described within Item No. 8, those are in addition to
3 just typical maintenance costs; is that right?

4 A. Correct.

5 Q. Okay. And what's the total cost associated
6 with this project?

7 A. \$1,784,846.

8 Q. Okay. And then moving on to our last item,
9 which is No. 9, could you please describe the Item No.
10 9 project?

11 A. Okay. The wells have a certain rate for
12 electricity power that we purchase from El Paso
13 Electric Company, and that rate is referred to as
14 critical peak pricing, so based on the -- the season
15 of the year and then the time of day, we pay more for
16 that water, and the -- the idea here by El Paso
17 Electric is that their peak is in the hot summer
18 months, and so if you're going to use power in the hot
19 summer months, then you're going to pay a premium for
20 that. The wells that we've talked about normally
21 would not be running in the peak summer months because
22 we would have the surface water available, but to the
23 extent that the surface water decreased, we needed to
24 supply groundwater to meet the demand and so that
25 meant running wells in the time period which the

1 critical peak pricing applied.

2 Q. What is the total associated cost for this
3 particular project?

4 A. \$15,959,410.18.

5 Q. Okay. Thank you for that.

6 MS. BARFIELD: Now, we can take this
7 down.

8 Q. (BY MS. BARFIELD) What sort of projects is El
9 Paso Water currently involved in or -- or maybe
10 planning in the near future to address inadequacy or
11 unreliability for surface water supplies?

12 A. So we have our aquifer storage recovery
13 project. So we talked a little bit about the balance
14 that we have to deal with between surface water
15 availability and when we have demand in the system, so
16 that's the reason that there's always a difference
17 between how much water we have available to treat and
18 how much we can treat, but the -- if we had a place to
19 store water, in other words, we had a period of time
20 where the demand is low and we could produce a higher
21 amount of surface water, if we had a place to store
22 that water, then we could save that for future use,
23 and so that's the basic concept behind the aquifer
24 storage and recovery is that we take that water, that
25 increment, we treat it, put it into the ground, and

1 store that for future use. That's aquifer storage
2 recovery.

3 Q. Is this project something that's currently
4 underway?

5 A. It is -- it is in design right now.

6 Q. Okay. And do you have an estimate for when
7 this project is going to be done?

8 A. It will be done in three years.

9 Q. Do you have a cost estimate for this project?

10 A. About \$13 million.

11 Q. All right. Is there anything else that El
12 Paso Water is currently involved in or planning to do
13 to address inadequacy of surface water supplies?

14 A. Yes. We talked about this a little bit, as
15 well. What we refer to as the advanced purified, so
16 it's the next increment in our reclaimed water system
17 where we take the purple pipe water, treat it to
18 drinking quality water standards to put it directly
19 into the distribution system. So that plant, the
20 advanced purified plant, we'll do that, and we
21 estimate that that's about 100, 115 million dollars.
22 That plant is in design right now, also.

23 Q. How long will it take to be constructed?

24 A. About three to four years.

25 Q. All right. Is there anything else that you

1 haven't told us about yet in terms of future projects?

2 A. Yes. So we're also in the midst of expansion
3 of the Kay Bailey Hutchison plant. So we have a -- a
4 multiple-phase expansion. So the first phase is
5 already done where we increased the capacity of the
6 pipes in the system to move water into the plant, and
7 then the second phase was we changed out the membranes
8 and we put in something called an interstage booster
9 just to increase the throughput through the reverse
10 osmosis, and then there will be a later stage where we
11 need to drill additional wells. But these first two
12 stages will be done this year, and that'll give us a
13 little bit more capacity to deliver water at the
14 system.

15 Q. How many years has this project been
16 underway?

17 A. It's -- this is -- we're finishing up about
18 the third year.

19 Q. Oh, okay. And what's the cost estimate for
20 the completion of the project?

21 A. For all of this work together, it's about \$12
22 million.

23 Q. All right. Is there also a project in the
24 works regarding importing water for Hudspeth County?

25 A. Yes. So Hudspeth County, which is the next

1 county over, we were able to purchase some land in an
2 area where there's no renewable groundwater supply,
3 and so we purchased that -- that land, and we also
4 purchased in some form or fashion the right of way so
5 that we would be able to run a pipeline from there
6 approximately a hundred miles into El Paso. So the
7 idea is that we would get all the land bought and paid
8 for, secure the water right, before it was necessary
9 to put in the wells, the pipeline and the pump station
10 to deliver the water to El Paso, which might not be
11 until 2030 or 2040.

12 **Q. Do you have a cost estimate for this plan?**

13 **A.** That's about an \$800 million project.

14 **Q. Okay. Mr. Balliew, would increased**
15 **reliability and availability of surface water be a**
16 **better solution than all of these expenditures you've**
17 **described to us?**

18 **A.** Yes, it would.

19 **MS. BARFIELD:** Your Honor, I have no
20 further questions for this witness at this time.

21 **JUDGE MELLOY:** All right. Mr. Kopp,
22 before you start, let me ask -- I want to talk to Ms.
23 Barfield about something. What I was discussing
24 earlier of Mr. Balliew's testimony concerning these
25 cost items laying foundation for Dr. Sunding's

1 testimony, are you planning to call Dr. Sunding in the
2 spring?

3 **MS. BARFIELD:** Yes, Your Honor.

4 **JUDGE MELLOY:** And since we're not going
5 to be getting into damages, what is the purpose of his
6 testimony in the spring?

7 **MS. BARFIELD:** Your Honor, he would lay
8 a foundation for injury to Texas. There's a lot of
9 just -- just factual explanation for the basis of the
10 injury without any quantification of the damages. We
11 will -- we will hold all quantification of damages
12 that Mr. -- that Dr. Sunding opines on.

13 **JUDGE MELLOY:** Well, I'll leave it up to
14 you, Mr. Kopp, as to how you want to handle the
15 cross-examination, but if you want to reserve your
16 cross of -- of -- of this witness until we get to a
17 damages phase and we actually get to quantification of
18 damages, I would -- I would certainly give you that
19 opportunity to do so, but if you want to do it now,
20 that's -- that's -- that's fine, too. I think we're
21 really getting pretty far into the weeds of actual
22 numbers at this point, and -- and I -- I just have to
23 tell Mr. Balliew that he may have to come back at some
24 point a couple years down the line if we get to that
25 -- if we get to a trial on damages, but -- but I'll

1 leave that up to you, Mr. Kopp. Before I turn it over
2 for cross -- I should ask, Mr. Dubois, do you have any
3 questions?

4 **MR. DUBOIS:** No, Your Honor, no
5 questions for Mr. Balliew. Thank you.

6 **JUDGE MELLOY:** Okay. All right.
7 Mr. Kopp, you may proceed then.

8 **MR. KOPP:** Thank you, Your Honor. Based
9 on your ruling just now, I think I may have a few
10 high-level questions for Mr. Balliew on the Texas
11 Exhibit 91, but we will reserve the detailed
12 examination of that for the next phase of trial.

13 **JUDGE MELLOY:** The phase after the next
14 phase.

15 **MR. KOPP:** Right. Thank you, Your
16 Honor.

17 CROSS-EXAMINATION

18 BY MR. KOPP:

19 Q. Hello, Mr. Balliew. I know we've met before.
20 My name is Michael Kopp. I'm representing the State
21 of New Mexico. I just have a few more questions for
22 you. Starting off, I would like to ask you a little
23 bit about the City of El Paso's use of groundwater.
24 So during your direct testimony, we heard a lot of
25 testimony about the different sources of water

1 available to the city. My question is from the early
2 1900s until at least around 1940, the city's water
3 supply came solely from groundwater; is that correct?

4 A. In general, that's correct. In the very
5 early days, there was only water out of the Rio
6 Grande, but once they discovered that you could drill
7 a well, then the -- then from that point on up until
8 1943, we were completely dependent upon, correct.

9 Q. Once the well drilling began, did the city
10 move away from using surface water; is that correct?

11 A. Yes.

12 Q. Okay. Approximately when did that well
13 drilling start?

14 A. It was probably in the 1903. I think that's
15 the general consensus of when that began.

16 Q. Okay. In this early period, that groundwater
17 the city used came solely from the Hueco Bolson; is
18 that correct?

19 A. That is correct.

20 Q. Okay. Even after 1940, at least through the
21 '90s, groundwater remained the primary source of
22 supply for the city of El Paso, correct?

23 A. Correct.

24 Q. Mr. Balliew, I want to pull up an exhibit
25 now. Let 's pull up New Mexico 2112.

1 **JUDGE MELLOY:** Mr. Kopp, let me
2 interrupt you for just one moment. When we were going
3 through the exhibits before, I apparently missed New
4 Mexico Exhibit 2286 as an A exhibit, and so that
5 exhibit is also in evidence. I don't want to forget
6 to do that.

7 **MR. KOPP:** Thank you, Your Honor.

8 **MS. BARFIELD:** And, Your Honor, if I
9 may, Texas does have objections noted in the objection
10 matrix to New Mexico 2112 on the basis of foundation.
11 There are additional hearsay and relevance objections,
12 which --

13 **MR. KOPP:** Your Honor, if I may lay a
14 foundation.

15 **MS. BARFIELD:** -- we'll see how it goes
16 if he wants to lay a foundation.

17 **JUDGE MELLOY:** Go ahead.

18 **MR. KOPP:** Thank you.

19 **Q.** (BY MR. KOPP) Mr. Balliew, I'm showing you
20 what's been marked as New Mexico 2112. Do you see
21 that on your screen?

22 **A.** I do see it.

23 **Q.** Okay. This document is titled, "Groundwater
24 Management of the Hueco Bolson Aquifer in El Paso
25 County, Texas." Do you see that?

1 A. I do see that.

2 Q. If you turn to Page 2, towards the middle of
3 the page, this indicates this was prepared for the El
4 Paso Public Service Board, El Paso, Texas, December,
5 1998. Do you see that?

6 A. I do see that.

7 Q. And El Paso Public Service Board, that's
8 another name for El Paso Water, correct?

9 A. Correct.

10 Q. Okay. Mr. Balliew, does El Paso Water keep
11 this document in its records?

12 A. I've never seen the document.

13 Q. Okay. Does El Paso Water typically keep
14 reports that it commissions from consulting firms like
15 this in its records?

16 A. Yes. We typically do.

17 Q. Okay. And you are not familiar with this
18 report?

19 A. I am not familiar with it, no.

20 Q. Okay.

21 MR. KOPP: Well, Your Honor, I would
22 like to try to submit this into evidence.

23 MS. BARFIELD: Your Honor, objection on
24 the basis of foundation. The witness has clearly
25 testified he does not have any familiarity with the

1 document itself.

2 JUDGE MELLOY: Well, I guess without
3 further foundation, I'm going to have to sustain that
4 objection.

5 MR. KOPP: That's fine. We can call up
6 a document that is in evidence to get at the
7 information I want. Can we pull up New Mexico 1672,
8 please?

9 Q. (BY MR. KOPP) You are familiar with this
10 report, correct, Mr. Balliew?

11 A. Yes, I am.

12 Q. Okay. Can we turn to Page 5, please? So in
13 Paragraph 1, this report indicates that it was
14 prepared in response to passage of a bill by the Texas
15 legislature, which called for identification and study
16 of areas in the State that are experiencing or
17 expected to experience within the next 20 years,
18 critical underground water problems. Do you see that?

19 A. I do see that.

20 Q. It continues, "This study in El Paso County
21 was conducted to address problems of overdraft and
22 qualify deterioration with respect to the Hueco
23 Bolson, the Mesilla Bolson, and the Rio Grande
24 alluvium aquifers." Do you see that?

25 A. I do see that.

1 Q. Okay. Is it correct in your experience that
2 at the time this report was prepared, El Paso County
3 was experiencing problems of overdraft and quality
4 deterioration with respect to the Hueco Bolson,
5 Mesilla Bolson, and Rio Grande alluvium aquifers?

6 A. Yes. That was going on at that time.

7 Q. Okay. Mr. Balliew, are you aware that in the
8 late 1990s, the Texas Natural Resource Conservation
9 Commission considered declaring a priority groundwater
10 management area in El Paso County?

11 A. Yes, I do remember that.

12 Q. And do you know what a priority groundwater
13 management area is?

14 A. The -- it's a -- a regulating mechanism which
15 you can use to control groundwater withdrawals by
16 means of implementing a fee system.

17 Q. Okay. And the Texas Natural Resource
18 Conservation Commission, that was a predecessor agency
19 to the Texas Commission on Environmental Quality; is
20 that correct?

21 A. That is correct.

22 Q. Okay. And the Natural Resource Conservation
23 Commission did declare a priority groundwater
24 management area in El Paso in the late 1990s, correct?

25 A. Well, I don't remember that -- that

1 happening. My -- my recollection was that it didn't
2 happen, but that's the extent of my recollection.

3 Q. Okay. But they at least considered it,
4 correct?

5 A. They did consider it, yes.

6 Q. Okay. And there has been no groundwater
7 conservation district formed in El Paso County,
8 correct?

9 A. Not as far as I know.

10 Q. Okay. So there are no restrictions on the
11 amount of groundwater El Paso Water can pump in El
12 Paso County?

13 A. Not that I'm aware.

14 Q. Okay. Would you agree that the majority of
15 the water pumped in the Hueco Bolson aquifer in Texas
16 is from City of El Paso municipal supply wells?

17 A. I don't have the exact numbers because there
18 are -- Fort Bliss does do considerable amount of
19 pumpage from the Hueco Bolson, and I don't -- I don't
20 have the exact numbers in front of me.

21 Q. So you don't know whether El Paso Water pumps
22 more or less water than Fort Bliss?

23 A. I don't know.

24 Q. Okay. Let's look back at New Mexico 1672,
25 and this is Page 16. In Paragraph 1, it

1 states, "Historical large-scale groundwater
2 withdrawals, especially from well fields located in
3 the downtown areas of El Paso and Ciudad Juarez, have
4 caused major water-level declines, which have
5 significantly changed the direction and rate of flow
6 and chemical quality of groundwater in the aquifers."

7 Do you see that?

8 A. Yes, I do see that.

9 Q. Mr. Balliew, do you know what a cone of
10 depression is?

11 A. I do.

12 Q. Is what is being referred to here in terms of
13 major water-level declines, would that qualify as a
14 cone of depression?

15 MS. BARFIELD: Your Honor, that calls
16 for expert testimony outside the scope of this
17 witness' testimony.

18 MR. KOPP: I believe Mr. Balliew has
19 been qualified as an expert in El Paso Water's
20 operations, including management of their groundwater
21 system. I would expect he would know the answer to
22 this.

23 JUDGE MELLOY: I'll let him answer. Go
24 ahead.

25 A. In general, Mr. Kopp, water-level declines

1 refers to over a -- a broad area and a cone of
2 depression over a smaller area.

3 Q. (BY MR. KOPP) So you would not characterize
4 the water-level drawdowns beneath the city of El Paso
5 as a cone of depression?

6 A. No. The water level in El Paso would --
7 would be decreasing, that is correct; but in some
8 places, there would be a cone of depression created
9 based on the higher level of pumping at that
10 particular location.

11 Q. I see. So if I understand you correctly,
12 you're saying a cone of depression is in relation to a
13 particular well?

14 A. Or a particular group of wells.

15 Q. Okay. Would you agree, however, that the
16 water level has declined in the groundwater table
17 beneath the city of El Paso?

18 A. Yes, I would agree.

19 Q. Has the geographic extent of that decline
20 increased over time?

21 A. I would -- I would say that the answer to
22 that is no, not the geographic extent.

23 Q. So the size of the area with a drawdown in
24 groundwater levels has not decreased?

25 A. Are you referring from the time this report

1 was written to the present or leading up to this
2 report?

3 Q. Well, how about since the City of El Paso
4 began drilling wells in, I think you said around 1903?

5 A. Then the answer would be yes. Since we
6 started drilling wells, then the area has increased.

7 Q. Okay.

8 MR. KOPP: Can we pull up a
9 demonstrative exhibit? This is New Mexico
10 Demonstrative 20.

11 Q. (BY MR. KOPP) Mr. Balliew, have you ever
12 reviewed reports or data on groundwater levels in the
13 Hueco Bolson?

14 A. Yes. Perhaps not this specific one, but I've
15 seen reports.

16 Q. Okay. So I'll represent to you this is a
17 graphic showing groundwater levels in both the Mesilla
18 Bolson and the Hueco Bolson, although the Hueco Bolson
19 is shown on the right. Mr. Balliew, is it your
20 understanding that groundwater levels in and around El
21 Paso have declined over the period shown in this
22 demonstrative exhibit?

23 A. Yes.

24 MR. KOPP: You can take that down.
25 Let's move back to New Mexico 1672 for just a minute.

1 Let's go to Page 14.

2 Q. (BY MR. KOPP) So in the second paragraph on
3 this page, the second sentence in that paragraph
4 states -- actually, no, not the second sentence.
5 Let's do the fourth sentence. "Water quality
6 deterioration due to large withdrawals and declining
7 water levels continues to be a problem in the El Paso
8 area." Do you see that?

9 A. I do see that.

10 Q. Do you agree that pumping groundwater from
11 the Hueco Bolson has contributed to a deterioration of
12 water quality in that aquifer?

13 A. I would qualify my answer by saying depends,
14 again, on the time frame that you're talking about,
15 but for sure from the time that groundwater started to
16 be pumped until some point in time, this was -- this
17 was a true statement. But then based on changes that
18 we made, we stabilized, especially either the Hueco or
19 the Mesilla Bolson, so that it was no longer a
20 problem.

21 Q. And when did that stabilization occur
22 approximately?

23 A. So we did it over a period of time. So the
24 Fred Hervey plant was one of the projects that was
25 instrumental so we started taking wastewater,

1 reclaiming it, and injecting it back into the aquifer,
2 and then the Kay Bailey Hutchison plant was the next
3 component that came along, so there were actually the
4 part of the problem in the water quality deterioration
5 is groundwater movement from areas outside our well
6 fields in towards the well fields so the Kay Bailey
7 Hutchison plant intercepted some of that flow, thus
8 preserving the quality of the wells in the well field.

9 Q. So do I understand you correctly,
10 Mr. Balliew, that as water was pumped from the
11 freshwater portions of the Bolson, that the change in
12 pressure tended to draw water from the more saline
13 portions of the aquifer?

14 A. Yes.

15 Q. Okay. I believe you discussed how as you
16 moved east from the Franklin Mountains, the TDS levels
17 in the groundwater in the Hueco tend to increase,
18 correct?

19 A. That is correct.

20 Q. Do they also tend to increase the deeper one
21 goes into the aquifer?

22 A. Yes. That is also correct.

23 Q. Okay.

24 MR. KOPP: Let's pull up New Mexico 243.

25 Q. (BY MR. KOPP) Mr. Balliew, I'm showing you a

1 document marked as New Mexico Exhibit 243
2 titled, "Meeting the Future Water Demands of El Paso."
3 Do you see that on your screen?

4 A. I do see that.

5 Q. And your name appears on the first slide,
6 correct?

7 A. Yes.

8 Q. Okay. Do you give presentations about El
9 Paso Water as part of your job duties?

10 A. I do.

11 Q. Okay. Does El Paso Water maintain records of
12 those presentations?

13 A. Yes.

14 Q. Okay. Does this appear to be a document
15 associated with one of those presentations you gave as
16 part of your official duties?

17 A. It does appear to be the first slide in a
18 PowerPoint presentation.

19 MR. KOPP: Okay. Your Honor, at this
20 time I'll move to admit New Mexico 243 into evidence.

21 MS. BARFIELD: Your Honor, I would
22 object to admitting the entirety of the document until
23 we know what questions are going to be asked regarding
24 the entirety of the document.

25 JUDGE MELLOY: All right. Why don't you

1 ask a few more questions, Mr. Kopp.

2 MR. KOPP: Sure. Let's turn to Page 11.

3 Q. (BY MR. KOPP) The map on this page shows two
4 aquifers, the Mesilla Bolson and the Hueco Bolson, and
5 there is a line through the Hueco Bolson, a dotted --
6 or dashed, excuse me, yellow line with the
7 designations F to the west and B to the east. Do you
8 see that?

9 A. I do.

10 Q. And what do the labels F and B on this map
11 indicate?

12 A. Freshwater and brackish water.

13 Q. Okay. So those are the fresher and more
14 saline portions of the aquifer we've been discussing?

15 A. Correct.

16 Q. Okay. How do you generally define fresh
17 groundwater at El Paso Water?

18 A. So, generally, freshwater would be a thousand
19 or less milligrams per liter TDS, and brackish water
20 would be more than a thousand.

21 Q. Okay.

22 MR. KOPP: Can we turn to Page 15?

23 Q. (BY MR. KOPP) So the map on this page shows a
24 few different things. First, there are red dots in
25 and around the city. Do you see those?

1 A. I do.

2 Q. And based on the legend, those appear to be
3 the locations of wells drilled into the Hueco Bolson,
4 correct?

5 A. Correct.

6 Q. Okay. And appears most, although not all of
7 those wells are in what's labeled here as the
8 freshwater portion of the aquifer, correct?

9 A. Correct.

10 Q. For the wells in the brackish portion, were
11 -- was the aquifer in that area brackish when those
12 wells were drilled?

13 A. In -- in some cases, it was correct. So if
14 you'll -- you see the well that's just below the blue
15 dot that says the Kay Bailey Hutchison plant, that
16 particular well, when it was drilled, was already in
17 the brackish zone, but the other ones for the most
18 part were not brackish when they were drilled.

19 Q. So is the boundary between these two portions
20 of the aquifer the fresh and the brackish, has that
21 shifted over time?

22 A. It has shifted.

23 Q. And that's due to the infiltration of
24 brackish water that we've discussed, correct?

25 A. Correct.

1 Q. So in the upper left corner of this map,
2 there are also a series of yellow dots. Do you see
3 those?

4 A. I do.

5 Q. And those are wells that are withdrawing
6 water from the Mesilla Bolson, correct?

7 A. Correct.

8 Q. And is that the Canutillo well field that
9 you've discussed today?

10 A. Yes, it is.

11 Q. So the first wells in the Canutillo well
12 field, those were drilled some time in the 1950s,
13 correct?

14 A. That's my understanding.

15 Q. Okay. And the City has pumped groundwater
16 from the Mesilla Bolson since that time?

17 A. Yes.

18 MR. KOPP: Let's turn to Page 16 now.

19 Q. (BY MR. KOPP) So on this page, Mr. Balliew,
20 there's a chart titled, "EPWU Total Water Production."
21 EPWU is El Paso Water, correct?

22 A. Correct.

23 Q. And are the volumes labeled on this chart at
24 the bottom as Hueco and Mesilla, does that reflect
25 volumes of water that the City has pumped from those

1 respective aquifers?

2 A. Yes.

3 Q. And similarly, the amounts labeled KBH, which
4 I think start around 2007, does that reflect water
5 that's been produced by the desalination plant?

6 A. Yes.

7 Q. So all the water shown on this chart except
8 for the green water, that consists of groundwater,
9 correct?

10 A. That's correct.

11 Q. Okay. And the green water, I should add,
12 that's labeled here as water from the Rio Grande,
13 correct?

14 A. Correct.

15 Q. And so that would be project water?

16 A. Yes.

17 Q. So looking at this chart, it appears that
18 until at least around 1989, a large majority of El
19 Paso's water came from groundwater; is that correct?

20 A. That is correct.

21 Q. And even since then, the city still gets a
22 significant portion of its supply from groundwater,
23 correct?

24 A. Yes.

25 Q. I believe you testified that even in a full

1 supply year, when you have your maximum allocation
2 from the project, around 50 percent of the city's
3 water is still sourced from groundwater, correct?

4 A. That's correct.

5 Q. Okay. Mr. Balliew, the city of El Paso has
6 grown quite a bit since the 1930s, correct?

7 A. Yes.

8 MR. KOPP: Your Honor, I apologize. I'm
9 getting ahead of myself. I would like to reoffer New
10 Mexico 243 into evidence at this time.

11 MS. BARFIELD: Your Honor, Texas objects
12 to offering the document in its entirety. Mr. Kopp
13 referred to Pages 11, Page 15, and Page 16. Texas
14 does not object to those three pages.

15 MR. DUBOIS: The United States will join
16 that objection, Your Honor.

17 JUDGE MELLOY: All right. Basically the
18 same as we did with the Texas exhibit. I'll admit
19 Pages 11, 15, and 16 of Exhibit 243 -- Texas Exhibit
20 243. You may proceed.

21 MR. KOPP: Thank you, Your Honor.

22 JUDGE MELLOY: Let me just ask one
23 question about that last -- the one that's up on the
24 screen right now. Basically, that's the same -- you
25 had an almost identical chart in one of your exhibits,

1 didn't you, Ms. Barfield?

2 MS. BARFIELD: That's correct, Your
3 Honor.

4 JUDGE MELLOY: Okay. So -- all right.
5 Thank you. You may go ahead, Mr. Kopp.

6 MR. KOPP: Thank you, Your Honor.

7 Q. (BY MR. KOPP) So, Mr. Balliew, I think I
8 asked you a question, and then I interrupted myself.
9 But the city of El Paso has grown quite a bit since
10 the 1930s, correct?

11 A. Yes.

12 Q. Okay. And it's projected to continue
13 growing, too, isn't it?

14 A. Yes.

15 MR. KOPP: Can we pull up New Mexico
16 818?

17 Q. (BY MR. KOPP) Mr. Balliew, I'm showing you
18 Exhibit New Mexico 818, the Far West Texas Water Plan
19 that's dated January of 2021. This has already been
20 admitted, but I'll just ask you, are you familiar with
21 the Far West Texas Water Planning Group?

22 A. I am.

23 Q. Okay. And if we turn to Page 438, about
24 halfway through that table, there are three rows for
25 municipalities, and I'll note that on the middle row

1 there is Scott Reinert is listed as a committee member
2 for El Paso. Do you see that?

3 A. Yes, I do.

4 Q. And you are listed as an alternate member for
5 City of El Paso?

6 A. Correct.

7 Q. So did you participate in the development of
8 this report marked as Exhibit New Mexico 818?

9 A. Yes, I did.

10 Q. I'd like to direct your attention now to Page
11 5, and specifically to the second paragraph on the
12 page. The first sentence states, "El Paso, one of the
13 fastest-growing cities in Texas, is the largest city
14 in the region, with a year 2020 projected population
15 of 734,031." Do you see that?

16 A. I do see it.

17 Q. Would you agree that the city of El Paso is
18 one of the fastest-growing cities in Texas?

19 A. I don't have any knowledge of the growth
20 rates of the cities in Texas.

21 Q. Would you agree that the city of El Paso has
22 grown quickly since the time you've been at El Paso
23 Water?

24 A. Yes.

25 Q. Does it continue to grow?

1 A. Yes, it does.

2 Q. Okay. Does the population cited here for the
3 year 2020, does that appear correct to you?

4 A. Yes.

5 Q. Okay. So let's zoom back out to the main
6 page here. So in the fourth paragraph, it
7 states, "The regional population is projected to
8 increase to 1,551,438 by the year 2070, which is an
9 increase of 597,403 citizens. Most of this increase,
10 563,305, is projected to occur in El Paso County." Do
11 you see that?

12 A. I do see that.

13 Q. Does EPWU -- El Paso Water, excuse me,
14 conduct its own population growth estimates?

15 A. No, we don't.

16 Q. Do you rely on the estimates that are
17 produced in this report?

18 A. We rely upon the estimates from the Texas
19 Water Development Board which go into this report.

20 Q. Okay. Mr. Balliew, we've discussed how El
21 Paso Water will sometimes use groundwater as its
22 primary source of supply, correct?

23 A. Yes.

24 Q. And of that groundwater, a fair amount was
25 from the Hueco Bolson. Would you agree with that

1 characterization?

2 A. Yes.

3 Q. And I think you mentioned in your direct
4 testimony that El Paso Water realized some time ago
5 perhaps starting in the 1970s that it could not meet
6 its water supply needs indefinitely using groundwater
7 from the Hueco Bolson, correct?

8 A. Correct.

9 Q. Okay.

10 MR. KOPP: Let's pull up Exhibit New
11 Mexico 458. Actually, never mind.

12 Q. (BY MR. KOPP) I'm not going to ask you
13 questions about this, Mr. Balliew. El Paso Water was
14 not just concerned with the quantity of groundwater it
15 was withdrawing, but also how pumping impacted water
16 quality, correct?

17 A. Correct.

18 Q. And I think you testified that El Paso Water
19 determined it needed to decrease the amount of
20 freshwater it pumped in the Hueco Bolson, correct?

21 A. Correct.

22 Q. Okay. And the plan has not been to reduce
23 pumping from the Hueco to zero; is that correct?

24 A. Correct. We don't feel that that is
25 possible.

1 Q. So, Mr. Balliew, I --

2 MR. KOPP: Let's pull up Exhibit New
3 Mexico 253.

4 Q. (BY MR. KOPP) So, Mr. Balliew, I'm showing
5 you what's been marked for identification purposes as
6 New Mexico 253. Do you see that on your screen?

7 A. I do see it.

8 Q. This document indicates it's an e-mail from
9 you to Ed Archuleta, and that's dated July 30th, 2012.
10 Do you see that?

11 A. Yes, I do see it.

12 Q. Mr. Archuleta, he was your predecessor as the
13 president of El Paso Water, correct?

14 A. Correct.

15 Q. Okay. And I believe at the time this e-mail
16 was sent, you were the vice president of operations
17 and technical services; is that correct?

18 A. That's right.

19 Q. And did you send this document from your
20 official work e-mail?

21 A. Yes.

22 Q. Okay. You sent it in your capacity as vice
23 president?

24 A. Yes.

25 Q. Okay. Does El Paso Water maintain

1 **work-related e-mails as part of its records?**

2 A. Yes.

3 Q. Okay.

4 **MR. KOPP:** Your Honor, at this time I'd
5 like to submit New Mexico's Exhibit NM 253 into
6 evidence.

7 **JUDGE MELLOY:** Any objection?

8 **MS. BARFIELD:** Yes, Your Honor. On the
9 basis of relevance. It's not clear what Mr. Kopp
10 intends to use the document for.

11 **MR. KOPP:** The document contains
12 information on pumping from the -- pumping groundwater
13 by the city of El Paso, reclaimed water use, river
14 allotments. I think there's a lot of relevant
15 information in here.

16 **JUDGE MELLOY:** All right. Objection is
17 overruled. Exhibit 253 is admitted, Texas 253 --
18 excuse me -- New Mexico 253.

19 Q. **(BY MR. KOPP)** Mr. Balliew, in this e-mail,
20 you indicate you're providing answers to questions
21 from someone named Dr. Bonart. Do you see that in the
22 subject line?

23 A. I do see it.

24 Q. Who was Dr. Bonart?

25 A. Dr. Bonart is a local veterinarian, and at

1 the time of this e-mail if memory serves me correctly
2 he was one of the members of the public service board.

3 Q. I see. So the first line states -- keep that
4 blown up for just a second.

5 "Here are my answers for some of Dr. Bonart's
6 questions. I can adjust them. I tried to make them
7 more general unless the numbers are precise." Do you
8 see that?

9 A. Yes.

10 Q. And below that in the document, I see some
11 lines are in black and some are in blue. Do you see
12 those?

13 A. I do see that.

14 Q. From that, it seems that your responses are
15 the blue text in Exhibit NM 253; is that fair?

16 A. I think that is correct.

17 Q. Okay. If you look down the e-mail, let's get
18 rid of that, do you see a line that reads, "Hueco
19 Bolson sustainable equals 45K acre-feet per year"?

20 A. Yes.

21 Q. Okay. Is it correct that El Paso Water
22 considers pumping from the Hueco in an amount less
23 than 45,000 acre-feet per year on average to be a
24 sustainable amount?

25 A. At the time that this was written, that's

1 probably correct statement.

2 Q. Does El Paso -- sorry. I didn't mean to
3 interrupt you, Mr. Balliew.

4 A. It may still be correct. I just haven't
5 looked at that number in a while.

6 Q. Okay. So just after that, you stated, "This
7 number is an average number. During droughts, the
8 number can go up. During the last ten years, we have
9 pumped less than 45,000 in eight years. We can also
10 increase the recharge of the Bolson from the Rio
11 Grande during full allotment years." Do you see that?

12 A. I do see that.

13 Q. This e-mail was sent in 2012. Is the
14 ten-year period you're referring to in this e-mail
15 from 2002 to 2011?

16 A. Plus or minus one year, yes.

17 Q. Okay. So during this period in eight of the
18 ten years, is it correct that you pumped from the
19 Hueco Bolson at what EPW -- El Paso Water considered
20 to be a sustainable level?

21 A. Yes.

22 Q. Okay. And there were several years of
23 surface water shortage during this period. Do you
24 agree with that?

25 A. So we're ending this period at 2012, so that

1 means the beginning of the period was 2000, so there
2 was at least one period of shortage in there, the 2002
3 year, yes.

4 Q. Okay. But it's your recollection that the
5 other years during that period, you generally had full
6 surface supplies?

7 A. Yes.

8 Q. Okay. Let's get rid of that. Looking a bit
9 farther down this e-mail, do you see the line
10 reading, "Full river allotment, 58K per acre-feet per
11 year"?

12 A. Yes.

13 MR. KOPP: Go ahead and blow up the text
14 below it, too.

15 Q. (BY MR. KOPP) Below that, you state, "We have
16 water rights for 70,000 acre-feet per year. The most
17 we have treated is 61,000 acre-feet per year." Do you
18 see that?

19 A. Yes.

20 Q. Okay. And I think you stated earlier that
21 the most you treated was around 62,000. Is it
22 somewhere in that ballpark, correct?

23 A. Yes, that's correct.

24 Q. Okay. Is it still the case that the most
25 surface water you have the capacity to treat is around

1 **61 or 62,000 acre-feet?**

2 A. When -- I'm going to give you a little bit of
3 a qualification there because demand is a part of that
4 equation. So we have the capacity, being the
5 treatment plant capacity, to treat more than that, but
6 in general, the demand in the system will restrict us
7 to the 62,000 acre-feet unless we have the water
8 storage system that I talked about.

9 Q. Sure. So perhaps once the aquifer storage
10 and recovery system is in place, you could treat more
11 than 62,000?

12 A. Yes.

13 Q. Okay. And then I'm just curious. It says
14 there, "Full river allotment, 58K acre-feet per year."
15 Does El Paso Water consider 58,000 acre-feet per year
16 to be its full allotment for planning purposes?

17 A. For planning purposes right now, I think that
18 we would use the number 60, 62,000, somewhere in
19 there.

20 Q. Okay.

21 MR. KOPP: All right. Let's pull that
22 down.

23 Q. (BY MR. KOPP) Mr. Balliew, I'd like to ask
24 you a little bit now about El Paso's use of surface
25 water. So I believe you testified earlier that El

1 Paso Water has approximately 70,000 acre-feet of
2 surface water rights from the project, correct?

3 A. Well, that was -- that was in that document
4 that we just looked at, but somewhere, depending on --
5 every year we add a little bit of increment in terms
6 of the leased water, the water rights assignments that
7 we get, so it's probably fairly close to that number.

8 Q. Okay. And I believe you also testified that
9 El Paso Water has acquired those rights by purchasing
10 project lands or leasing the right to use water from
11 those lands, correct?

12 A. Correct.

13 Q. And I think you also testified that El Paso
14 has signed contracts with the United States and EP1
15 that allow these purchases and leases, correct?

16 A. Did you say that I said that?

17 Q. Well, maybe I'm getting confused. Has El
18 Paso signed contracts with the United States and EP1
19 to allow it to purchase and lease project lands and
20 project water?

21 A. We have a number of contracts, yes, and I
22 think that -- that that is a correct statement. Not
23 sure about all of them, but at least some of them.

24 Q. Does El Paso Water use any surface water from
25 the project for which it does not have a contract?

1 A. No.

2 Q. Okay. And I believe the City of El Paso
3 began to use surface water around 1941 when it signed
4 its first contract, correct?

5 A. Correct.

6 Q. Okay. I want to go through several of these
7 contracts now. I'll try to do this rather quickly.

8 MR. KOPP: Can we pull up Texas 88?

9 Q. (BY MR. KOPP) Okay. So, Mr. Balliew, I'm
10 showing you what's been marked as Texas 88. This is
11 titled, "Contract between The United States of America
12 and The City of El Paso and El Paso County Water
13 Improvement district," dated February 18, 1941. Do
14 you see that?

15 A. I do see that.

16 Q. Are you familiar with this agreement?

17 A. I am familiar. If you allow me to make a
18 little bit of correction. This date is 1941. You
19 mentioned that was the first date that we started
20 utilizing the water, but the Robertson plant was
21 actually not constructed in 1943 so --

22 Q. Oh, okay.

23 A. But, yes, the contract came first and then
24 the water treatment plant.

25 Q. Okay. Thank you for the clarification. I

1 believe this contract has already been testified to by
2 a few witnesses that it generally allows the City to
3 purchase a certain amount of project lands and use the
4 water associated with those lands, correct?

5 A. I'm not familiar, as I told you in my
6 deposition, with the -- with the contracts themselves.
7 From my stand point, what we have is a system where
8 all of these contracts get boiled down to a
9 spreadsheet, and that spreadsheet then shows how much
10 water that we are able to get. Each contract has a
11 little line item in there with -- with the fine print
12 and then how much money we pay for the water at the
13 end of the day. So I couldn't tell you what's in each
14 individual contract because these contracts have been
15 around for a long time and so, now, what we have is a
16 very simple way of looking at it that we can take
17 water, and there's a simple spreadsheet that shows how
18 much we can take in each contract and what the total
19 amount we pay the district is for that water.

20 Q. Okay. Fair enough.

21 MR. KOPP: Well, let's go ahead and take
22 this down. Let's pull up Exhibit New Mexico 202.

23 Q. (BY MR. KOPP) So, Mr. Balliew, I'm showing
24 you what's been marked as Exhibit New Mexico 202.
25 This document states -- it is a letter from Dr. Al

1 Blair. I believe he's the consultant and district
2 engineer for EP1, to Fernie Rico. You mentioned him
3 earlier. He's listed here as the chief operating
4 officer for El Paso Water. Do you see that?

5 A. I do see it.

6 Q. It's dated January 23rd, 2018. Do you see
7 that?

8 A. Yes.

9 Q. Okay. And it states it's in regard to final
10 charges for 2017 under the 2001 implementing contract.
11 Do you see that?

12 A. Right.

13 Q. And if you look at the CC line, it appears
14 you were copied on this letter, correct?

15 A. Yes.

16 Q. Okay. And is this document part of El Paso
17 Water's records?

18 A. Yes. I'm sure we would have it.

19 MR. KOPP: Your Honor, at this time I'd
20 like to submit Exhibit New Mexico 202 into evidence.

21 JUDGE MELLOY: Did you say 202?

22 MR. KOPP: Yes.

23 JUDGE MELLOY: This says 141. I might
24 be getting it mixed up here.

25 MR. KOPP: I'm seeing 202 on my screen,

1 Your Honor.

2 JUDGE MELLOY: Just a second.

3 MR. KOPP: Is anybody else seeing 141?

4 MS. BARFIELD: No. I have 202 on my
5 end, as well.

6 JUDGE MELLOY: All right. I have -- oh,
7 I'm sorry. My screen is cutting off the bottom. I
8 was -- I saw that Texas versus NM No. 141, and then --
9 okay. I'm -- what's the 141 refer to?

10 MR. KOPP: I believe, Your Honor, that's
11 just the case number in the Supreme Court docket.

12 JUDGE MELLOY: Oh, okay. All right.
13 I'm sorry. Ms. Barfield, do you have an objection?

14 MS. BARFIELD: No, Your Honor.

15 JUDGE MELLOY: All right. New Mexico
16 202 is admitted.

17 Q. (BY MR. KOPP) Mr. Balliew, you were just
18 discussing a spreadsheet that you have that shows the
19 different El Paso Water contracts for Project water
20 and the amount of water you can receive. Is this the
21 spreadsheet you were referring to?

22 A. No. It's not the one I was referring to.
23 This is -- this is the spreadsheet that's -- that's
24 maintained by the District. We have our own
25 spreadsheet. So this is -- this is what we refer to

1 as the invoice so the bill, how much we have to pay
2 the District for the water. So we compare this
3 against our own spreadsheet to make sure that the
4 numbers jive, and then we would issue the payment to
5 the District.

6 Q. I see. But you're familiar with the document
7 shown here as New Mexico 202?

8 A. Yes.

9 Q. Okay. Does El Paso Water receive a letter
10 like Exhibit New Mexico 202 from EP1 every year?

11 A. Typically, yes.

12 Q. Okay. So I was just asking you a question
13 about the 1941 contract. If you look on the leftmost
14 column, the one labeled "contract," do you see the
15 first line there says 1941 PSB contract owned lands?

16 A. Yes.

17 Q. And the next column to the right is labeled
18 irrigable acres. Do you see that?

19 A. Yes.

20 Q. So in the row for the 1941 PSB contract, it
21 shows that there are 2,000 acres of irrigable land.
22 Do you see that?

23 A. Yes.

24 Q. And is that the volume of lands that -- the
25 number of acres -- excuse me -- that El Paso Water has

1 purchased pursuant to this 1941 contract?

2 MS. BARFIELD: Objection; lacks
3 foundation.

4 Q. (BY MR. KOPP) Do you know whether this is the
5 number of acres that El Paso Water has purchased
6 pursuant to this contract?

7 A. Well, when you say El Paso purchased, the --
8 my understand -- my recollection of the 1941 contract
9 was that this was a pot of land that was put together
10 that was funded by the United States Army ultimately
11 to piece together the water that would be used for the
12 Robertson-Umbenhauer plant, which they also financed.
13 So I'm not sure El Paso purchased that land or whether
14 it was the federal government, but somehow the land
15 did end up in our inventory.

16 Q. El Paso does own that land today, correct?

17 A. Yes.

18 Q. The next column over from irrigable lands is
19 labeled, "Allocation, acre-feet per acre." Do you see
20 that?

21 A. I do see that.

22 Q. Below that, it lists the number 3.5. Do you
23 see that?

24 A. Yes.

25 Q. Is it your understanding that 3.5 acre-feet

1 per acre is the maximum allocation that these 2,000
2 acres can receive from the project?

3 A. Yes.

4 Q. Okay. So in this particular -- in this
5 particular year, the allocation to those lands was
6 7,000 acre-feet in the next column over. Do you see
7 that?

8 A. Yes.

9 Q. Okay. I'm going to just leave this exhibit
10 up, but let's move down to the next line. On the left
11 it says, "1949 Excess Water." Do you see that?

12 A. Yes.

13 Q. Mr. Balliew, are you familiar with a 1949
14 contract between the City of El Paso, EP1, and the
15 Bureau of Reclamation that allows the City of El Paso
16 to use excess and flood waters?

17 A. I'm not generally familiar with it.

18 Q. Are you aware that such a contract exists?

19 A. Well, I see that line on this -- on this
20 report, so I presume that it does exist, but I don't
21 think I've ever seen it.

22 MR. KOPP: Okay. Can we pull up really
23 quickly US-79, and can you move to the next page?

24 Q. (BY MR. KOPP) Mr. Balliew, this exhibit was
25 previously admitted, but I'll represent to you that

1 this is the contract I was just discussing. You're
2 not familiar with this agreement?

3 A. No.

4 Q. Okay.

5 MR. KOPP: Can we go back to New Mexico
6 202?

7 Q. (BY MR. KOPP) So looking, again, at the row
8 for 1949 excess water, I will note that the columns to
9 the right of that either say N/A or have no values in
10 them. Do you see that?

11 A. Yes.

12 Q. Have you ever seen any positive values in
13 this row on these invoices, I think you called them,
14 from EP1?

15 A. I do not recall having ever seen any numbers
16 in that row.

17 Q. Okay. So the best of your knowledge, El Paso
18 Water has never used any project surface water that's
19 been charged under this particular agreement?

20 A. Not to the best of my knowledge.

21 Q. Okay. Let's look now at US-80. So,
22 Mr. Balliew, I'm showing you what's been marked as
23 Exhibit US-80, which says it's also a contract
24 permitting the City of El Paso to acquire additional
25 water supply for municipal purposes, and this is dated

1 December 20th, 1962 at the top. Do you see that?

2 A. I do see it.

3 MS. BARFIELD: Excuse me. I need to
4 object. In as much as this is not on the witness'
5 cross-examination list. Mr. Kopp, if I'm wrong,
6 please let me know, but I'm flipping through very
7 quickly trying to -- I do not see it.

8 MR. KOPP: My apologies, Theresa. I
9 think we sent this to you before this particular
10 exhibit was admitted. We had this on our list as New
11 Mexico 427, but then it came in yesterday as US-80.

12 MS. BARFIELD: Thank you for the
13 clarification.

14 Q. (BY MR. KOPP) I'm sorry, Mr. Balliew. Are
15 you familiar with this agreement?

16 A. I know there is a 1962 contract, yes.

17 Q. Okay.

18 A. As far as the details, I'm not familiar, and
19 I don't look at it.

20 Q. Okay. Are you generally aware, I think
21 Dr. Blair testified this agreement allows El Paso
22 Water to lease water from project lands and use that
23 water for municipal purposes?

24 A. I do have that general understanding.

25 Q. Okay. Do you understand the tracts the City

1 leases have to be 2 acres or less under this
2 agreement?

3 A. Yes.

4 Q. And I believe they also need to be within
5 city limits of El Paso; is that correct?

6 A. Yes.

7 Q. Are you aware of any limitation on the number
8 of acres El Paso Water can lease water from under this
9 agreement?

10 A. I am not aware of a limitation.

11 Q. Okay. And the City has leased water from
12 Project lands that meet these criteria, correct?

13 A. Yes.

14 Q. Okay.

15 MR. KOPP: Can we go back to New Mexico
16 202?

17 Q. (BY MR. KOPP) So looking back on the left
18 side again, I think the third row down under contract,
19 it says, "1962 PSB Contract Leases." Do you see that?

20 A. Yes.

21 Q. And the next column over to the right, it
22 says 6,022.61. Is that the approximate number of
23 acres El Paso Water has leased as of the date of this
24 letter?

25 A. Yes.

1 Q. Okay. And that number changes pretty
2 regularly, though, correct?

3 A. Yes. That should go up every year.

4 Q. Okay. And did I understand you correctly to
5 testify earlier that El Paso Water has around 20,000
6 acres of land leased now; is that correct?

7 A. No. What I was referring to there was the
8 total of the leased purchased for the lower valley in
9 all those pieces that put together the amount of water
10 that we withdraw through our surface water treatment
11 plants.

12 Q. I see. So that 20,000 figure referred to
13 lands that were leased by the Lower Valley Water
14 District, as well?

15 A. And the owned lands, the whole --

16 Q. Sure.

17 A. -- land that we're able to obtain water from.

18 Q. Okay. Thank you for that clarification. so
19 back on Exhibit 202, I believe next to that 6,022.61
20 figure, in the allocation acre-feet per acre column,
21 it says 3.5. Do you see that?

22 A. Yes, I do.

23 Q. Is it correct that that is the maximum
24 allocation these leased lands can receive per acre?

25 A. I -- yes. That's my understanding.

1 Q. Okay.

2 MR. KOPP: Let's pull up New Mexico 87.

3 Q. (BY MR. KOPP) Do you recognize this document,
4 Mr. Balliew? I'll represent to you that it was
5 previously admitted.

6 A. Yes.

7 Q. Okay. This says it's a contract regarding
8 delivery of water to the El Paso County Lower Valley
9 Water District Authority, correct?

10 A. That is what it says.

11 Q. Okay. So I believe yesterday, Mr. Reyes from
12 EP1 testified that Lower Valley Water District is a
13 water district in the southeastern portion of El Paso
14 County; is that correct?

15 A. Yes.

16 Q. Okay. And El Paso Water diverts and treats
17 water -- surface water, I should say, on the Lower
18 Valley Water District's behalf and delivers it to the
19 lower valley water district, correct?

20 A. Yes.

21 Q. And El Paso Water also treats lower valley
22 water district's wastewater, correct?

23 A. Yes.

24 Q. Okay. I believe Mr. Reyes also testified
25 that the lower valley water district leases water from

1 Project lands; is that right?

2 A. I don't have any direct knowledge of that.

3 Q. Okay. Let's look back at New Mexico 202 then
4 for a moment. So on the left side under the row 1962
5 PSB contract leases, do you see the row that says,
6 "1988 LVWD contract owned lands" --

7 A. Yes.

8 Q. -- and then below that, "1988 LVWD contract
9 leases"?

10 A. I do see that.

11 Q. Okay. So in the owned lands row, the next
12 column over states that there are 1.25 acres of
13 irrigable land that appear to be owned by the lower
14 valley water district. Do you see that?

15 A. I do see it.

16 Q. Is that correct in your experience?

17 A. I don't really have any recollection of that.

18 Q. Okay. Fair enough. The next row down
19 reflects that there are 3,729.92 acres owned by the
20 lower valley water district; is that correct?

21 A. That is what it says there, yes.

22 Q. Sure. So if we add all those totals up
23 together, it's reflecting at this time, and this is
24 excluding the 2001 contract lands, which we haven't
25 covered yet, there were 11,753.78 acres owned or

1 leased between the two entities; is that what's shown
2 here?

3 A. Yes.

4 Q. Okay. And your testimony is that that number
5 has increased since that time, correct?

6 A. Yes.

7 Q. Okay. Mr. Balliew, for any of these
8 contracts we've just been discussing, do you know
9 whether any studies were conducted of impacts to
10 project return flows from transferring this water to
11 municipal use?

12 A. I'm not aware of any such studies.

13 Q. Okay.

14 MR. KOPP: All right. Let's pull up
15 US-116. Can you turn to Page 3?

16 Q. (BY MR. KOPP) Mr. Balliew, this document that
17 I've pulled up, US-116, was previously admitted. This
18 is -- says it's a contract, implementing third-party
19 contract among the Bureau of Reclamation, EP1, and the
20 City of El Paso Public Service Board for conversion of
21 Rio Grande Project water to municipal use. Do you see
22 that?

23 A. Yes.

24 Q. And are you familiar with this agreement?

25 A. I am familiar that the agreement exists, and

1 I generally am aware of this sewage effluent exchange,
2 but, again, not the details of the contract
3 specifically.

4 Q. Fair enough. And by, "sewage effluent
5 exchange," you're referring to the fact that this
6 contract requires the City of El Paso to deliver
7 certain amounts of sewage effluent to EP1, correct?

8 A. Yes.

9 Q. Okay. I want to just really touch on a few
10 subjects in here. I know this is a long, complicated
11 contract, but can I direct your attention to Page 12.
12 So this is actually Paragraph 7A(1), where it starts
13 at the bottom of the previous page, Page 11. But four
14 lines down on Page 12, it refers to the fact,
15 says, "During calendar year 2002 and each calendar
16 year thereafter, in addition to the water supplied to
17 the city pursuant to the existing contracts, subject
18 to applicable law, subject to availability, subject to
19 Section 7A(2) below, the District shall sell and
20 deliver to the city at the point of delivery and the
21 City shall purchase from the District not more than
22 28,116 acre-feet of district water." Do you see that?

23 A. Yes.

24 Q. I believe yesterday, Mr. Reyes testified that
25 this 28,116 acre-feet figure, that's the amount of

1 water that El Paso Water can purchase under this
2 agreement. Do you agree with that?

3 A. Looks like that's what it says.

4 Q. Fair enough. And this is in addition to
5 amounts that El Paso Water receives under the prior
6 contracts we've discussed, correct?

7 A. I would assume so.

8 Q. Okay. Let's turn to Page 18 now, and let's
9 look at the first sentence under Paragraph 8A. So
10 this states, "From February 15 through October 15 each
11 year, the City shall deliver into the American Canal
12 Extension not less than 12,000 acre-feet of usable
13 sewage effluent from the Haskell Street Wastewater
14 Treatment Plant." Do you see that?

15 A. I do see that.

16 Q. WWTP, I should say that means wastewater
17 treatment plant, correct?

18 A. Correct.

19 Q. Okay. Does El Paso Water, in fact, discharge
20 its treated sewage effluent from the Haskell Street
21 Wastewater Plant into the American Canal Extension?

22 A. Most of the time, yes.

23 Q. Okay. Under what circumstances would El Paso
24 Water not discharge water into the American Canal
25 Extension?

1 A. I think at the direction of the El Paso
2 County Water Improvement District No. 1. For example,
3 if they were going to do some sort of canal
4 maintenance or something like that, we would discharge
5 directly into the river.

6 Q. I believe that appears here in Paragraph 8A a
7 little farther down.

8 MR. KOPP: Can you zoom out for a
9 minute?

10 Q. (BY MR. KOPP) I believe that's the third
11 sentence here beginning, I think, five lines down. It
12 says, "Notwithstanding anything to the contrary
13 herein, the District reserves the right to refuse to
14 accept any effluent and to require the City to
15 discharge the same directly into the Rio Grande." Do
16 you see that?

17 A. I do see that.

18 Q. To the best of your knowledge, you mentioned
19 -- let me back up there. You mentioned the District
20 might tell you to discharge effluent to the Rio Grande
21 if they were doing canal maintenance, correct?

22 A. That is just one example. There would be
23 other reasons why they would do that.

24 Q. Sure. In your experience, though, have they
25 ever directed the City of El Paso to discharge water

1 from the Haskell Street plant to the Rio Grande
2 because of quality concerns?

3 A. I don't recall anything of that nature.

4 Q. Okay. Let's turn to Page 20. And I want to
5 look at the first sentence under Paragraph 9A(1).
6 This is kind of a long sentence, but it refers to each
7 acre of land owned by the City, but in no case more
8 than 1,000 acres -- I'm skipping the parenthetical.
9 "During the term hereof the district shall provide
10 annually to the city and the city shall purchase from
11 the district the total quantity of district water
12 which in such calendar year the owner of the lands
13 listed on Exhibit B would have been entitled to
14 receive from the District." Do you see that?

15 A. Yes.

16 Q. Mr. Balliew, is it your understanding that
17 this contract authorized the City of El Paso to
18 purchase additional acres -- more Project lands, I
19 should say, than it had purchased prior to 2001?

20 A. Yes.

21 Q. And is that the 1,000 acres shown here?

22 A. Yes.

23 Q. And it states down there at the very bottom
24 that, "Such quantity shall never exceed 4 acre-feet of
25 district water per acre of land." Do you see that?

1 A. I do see that.

2 Q. Do you know if the City of El Paso does, in
3 fact, receive up to 4 acre-feet per acre of district
4 water for this thousand acres of land?

5 A. I think that does correspond with the
6 invoice.

7 Q. Okay. But to the best of your knowledge, for
8 the prior contracts that we discussed with the 3.5
9 acre-feet per acre limitation, that's still in place,
10 correct?

11 A. Yes.

12 Q. I want to just highlight one more provision
13 from this agreement.

14 MR. KOPP: Can we turn to Page 28? And
15 let's highlight Paragraph 12A.

16 Q. (BY MR. KOPP) So this refers in Line 9 here
17 to the obligation of City to deliver other usable
18 sewage effluent. Do you see that?

19 A. Yes.

20 Q. And then it states, "In addition to any
21 usable sewage effluent, the City shall annually
22 deliver to the Rio Grande upstream of American
23 Diversion Dam to the American Canal or its extension,
24 to the Riverside Canal, or to the Riverside
25 Intercepting Drain, other usable sewage effluent." Do

1 you see that?

2 A. Yes.

3 Q. And I'm not going to continue on. There's a
4 fairly lengthy recitation here of a formula, but is it
5 your understanding that El Paso Water generally
6 delivers treated sewage effluent to EP1 besides the
7 effluent from the Haskell Street plant?

8 A. Yes.

9 Q. Okay. And is this effluent generally
10 delivered between February 15th and October 15th of
11 each year?

12 A. Well, I think the -- I think the delivery
13 does not -- is not restricted to that time frame. I
14 think that time frame is the requirement.

15 Q. I see. So do you deliver sewage effluent
16 year round to EP1?

17 A. Yes.

18 Q. Okay.

19 A. Or to the river, again, depending upon where
20 they want it delivered.

21 Q. Sure. I'm sorry. I misspoke earlier when I
22 said this was the last question. I do want to look at
23 one more paragraph here. Let's next look at Paragraph
24 12B(1), which is at the bottom of the page. So
25 there's kind of a lot to unpack in this paragraph, but

1 I want to start with this first sentence that refers
2 to, "The underflow of the Rio Grande upstream of the
3 American Diversion Dam captured each year during the
4 term hereof by the City." Do you see that?

5 A. Yes.

6 Q. Do you know what's referred to here as "the
7 underflow of the Rio Grande captured each year during
8 the term by the City"?

9 A. No, I don't.

10 Q. The Canutillo well field is located upstream
11 from the American Dam, correct?

12 A. Correct.

13 Q. And are you aware whether there's any
14 requirement that the City offset the impacts of
15 pumping from that well field?

16 A. Yes. That is -- yes, I do recall that.

17 Q. Okay. Can we look very quickly at the top of
18 the next page here. So this states that, "Sewage
19 effluent must be delivered in a quantity not less than
20 160 percent of such underflow in addition to the
21 quantity of other usable effluent required under
22 Section 12A above." Do you see that?

23 A. Yes.

24 Q. Is that requirement the -- that the City
25 deliver not less than 160 percent of such underflow,

1 is that the offset requirement that I just asked you
2 about regarding the Canutillo well field?

3 A. Now that I see this, I think that's correct.

4 Q. Okay. The amount of underflow that the
5 Canutillo well field captures, that's determined using
6 a model, correct?

7 A. Yes. It's my understanding that that is done
8 by the Bureau of Reclamation.

9 Q. Okay. And is it correct that EP -- El Paso
10 Water typically is not able to discharge enough
11 effluent in this area to meet or exceed that 160
12 percent requirement?

13 A. Yes.

14 Q. And when El Paso Water does not meet this
15 discharge requirement, it gets charged for the
16 shortfall as the surface water delivery; is that
17 correct?

18 A. That is my understanding.

19 Q. Okay. And the Canutillo well field, I think
20 we established, was first -- let me rephrase that.

21 The Canutillo wells were first drilled in the
22 1950s, correct?

23 A. Yes.

24 Q. Okay. Let's pull up New Mexico -- Joint,
25 excuse me, 410. Mr. Balliew, I'm showing you what's

1 been marked as Exhibit Joint 410. This states it's a
2 memorandum of understanding between El Paso Water
3 Utilities and El Paso County Improvement District No.
4 1 regarding other usable sewage effluent under the
5 2001 contract. Do you see that?

6 A. Yes.

7 Q. This document was admitted earlier, but I
8 just want to look at Page 3 here, and your signature
9 appears on that page. Do you see that?

10 A. Yes.

11 Q. Are you familiar with this MOU?

12 A. I am familiar with it.

13 Q. Okay. So on Page 1, the second paragraph
14 states, "The district and EPWU staff agreed that under
15 the 2001 contract, the following amounts of treated
16 sewage effluent are either obligated to the District
17 or available to EPWU, as shown in the table below."
18 Do you see that?

19 A. Yes.

20 Q. We just looked at a -- a couple of provisions
21 in that 2001 contract regarding sewage effluent that
22 El Paso Water provides to EP1, and I just want to try
23 to understand that a little better. Do you know if
24 the 2001 contract referred to here is the -- the same
25 2001 contract we were just discussing?

1 A. I'm sure it is, yes.

2 Q. Okay. So if you look on the left, the first
3 five rows, those are under the heading, "February 15
4 to October 15, 242 days." Do you see that?

5 A. Yes.

6 Q. Okay. In the bottom half of the table under
7 the heading, "Annual 365 days," I believe that shows
8 El Paso Water's annual obligations to provide effluent
9 to EP1; is that correct?

10 A. Yes.

11 Q. Okay. To the right, there are two columns,
12 one labeled "2014 obligation," and one labeled "full
13 allocation year obligation." Do you see that?

14 A. Yes.

15 Q. I'm going to highlight the "full allocation
16 year obligation" column. Looking at this column,
17 Mr. Balliew, does this accurately reflect how much
18 effluent El Paso Water generally has available in a
19 full supply year?

20 A. I don't recall specifically the numbers. I
21 would have to have that converted from acre-feet to
22 million gallons per day which is what I normally think
23 about when I think about wastewater discharges.

24 Q. Sure. Do you have any reason to believe the
25 numbers on this document are incorrect?

1 A. No.

2 Q. Okay. Currently, El Paso Water provides much
3 of its effluent to EP1, correct?

4 A. Yes.

5 Q. And that includes the amounts that it's
6 required to provide under contract, correct?

7 A. Yes.

8 Q. And even for amounts in excess of the
9 contractual requirements, EPW -- El Paso Water, excuse
10 me, provides most of that effluent to EP1, as well,
11 correct?

12 A. Yes. Most of it.

13 Q. Okay. You discussed reclaimed water earlier,
14 though. It sounds like El Paso Water has plans to use
15 some of this additional effluent for some new
16 reclaimed water projects; is that fair?

17 A. Yes. So when -- one of the little caveats I
18 want to make in here is that Mr. Rios also mentioned
19 that the Rio Bosque wetlands. So there is some of
20 this effluent that is put on the Rio Bosque wetlands,
21 and there is a timetable that's associated with that.
22 But having said that, for the increased usage, there
23 is a small amount of increased usage, but there's
24 additional flow that comes into the system. We're
25 talking specifically about the Bustamonte plant.

1 That's the one that's in question here. When we build
2 our advanced purifying plant, we're going to take a
3 portion of that Bustamonte effluent, treat it, and put
4 it into the system as potable water, but from the time
5 this document here was created, there's additional
6 flow that's going in to the Bustamonte plant. So the
7 general idea is that we're not going to take any of
8 the effluent that we're obligated to supply to the
9 district, that it would be from additional effluent
10 that comes into the plant.

11 **Q. I understand. Thank you. Does El Paso Water**
12 **want to increase its use of reclaimed water so long as**
13 **it's not violating those contractual requirements?**

14 A. We want to be open to the possibility. That
15 advanced purified plant that we talked about is the
16 only one at this point in time that we're foreseeing
17 in -- in the future. That doesn't mean that there
18 won't be some point where we might want to do that,
19 but at this point in time, that's the only plant.

20 **Q. I understand. But if you did increase your**
21 **other uses of reclaimed water, perhaps expanding the**
22 **advanced purification system that you mentioned, you**
23 **would have less water to give to EP1 overall, correct?**

24 A. When we say less water, that's -- we need to
25 compare one point in time to the other, because every

1 year when we have more customers, we're delivering
2 more water to those customers, there's more effluent
3 that's created. so there's more effluent that goes
4 into the plants, more effluent that goes out of the
5 plants. We may retain a portion of that additional
6 effluent, but in general, our -- our idea is that
7 other than the advanced purifying plant, that that
8 effluent would continue into the District's system.

9 Q. But beyond the -- the contractual
10 requirements, you would not be required to continue
11 giving that effluent to EP1, correct?

12 A. Correct.

13 Q. Okay. And we just discussed how the Haskell
14 Wastewater Plant -- the Haskell Street Wastewater
15 Plant can discharge to the American Canal Extension or
16 to the Rio Grande, correct?

17 A. Yes.

18 Q. Before the American Canal Extension was
19 built, the Haskell Street Plant discharged all of its
20 effluent to the Rio Grande, correct?

21 A. I think that's correct.

22 Q. Okay. Mr. Balliew, would you agree that the
23 quality of the surface water you receive from the
24 Project through EP1 is generally pretty good?

25 A. Generally, yes.

1 Q. And the quality of the effluent you provide
2 EP1, specifically in reference to its TDS levels, is
3 generally poorer than the quality of the Project
4 surface water you receive, correct?

5 A. Yes.

6 MR. KOPP: Let's pull up Exhibit New
7 Mexico 198.

8 Q. (BY MR. KOPP) Mr. Balliew, I'm showing you a
9 document that's been marked as Exhibit New Mexico 198.
10 It's titled, "Interim Agreement Regarding
11 Forbearance." It's between the Bureau of Reclamation,
12 EP1, and the City of El Paso Public Service Board. Do
13 you see that?

14 A. No. If you'll give me just a minute, the
15 video seems to be frozen here.

16 Q. Oh, sure.

17 A. Just hang on one second.

18 Q. Mr. Balliew, do you see the document marked
19 as Exhibit NM-198 now?

20 A. Yes.

21 Q. Okay. And this states it's, "An interim
22 agreement regarding forbearance between the Bureau of
23 Reclamation, El Paso County Water Improvement District
24 No. 1, and the City of El Paso Public Service Board."
25 Do you see that?

1 A. Yes.

2 Q. Are you generally familiar with this
3 agreement, Mr. Balliew?

4 A. Yes, I am.

5 Q. So let's turn to Page 4 on this, and I want
6 to look at the sentence in Paragraph 4A. It's kind of
7 a long sentence so I'm not going to read the whole
8 thing, but generally at the beginning it says, "The
9 City shall have the right to enter into contracts
10 defined as forbearance contracts with owners of
11 District Water Rights Land by the terms of which the
12 landowner agree to forbear all or a portion of the
13 district water which the landowners are entitled to
14 receive from year to year from the District and to
15 assign to the City the right to receive all or a
16 portion of that District Water." Do you see that?

17 A. Yes. I see that.

18 Q. Do you agree that a forbearance contract, as
19 described here, appears to be short-term agreement
20 with Project landowner to allow El Paso Water to use
21 that landowner's project water?

22 A. Yes.

23 Q. Did El Paso Water ever execute any
24 forbearance agreements with El Paso landowners?

25 A. No. Practically speaking, there was a

1 difficulty that arose, and that difficulty has to do
2 with how the water is delivered. So in a drought
3 situation, let's say that normally it would be 4
4 acre-feet allotment, and let's say that it was 2, but
5 the time period was the same, from mid March to mid
6 October, then something like this would make sense
7 where we can all plan out in advance and be able to
8 take advantage of this, but practically speaking,
9 what's happened in the drought is that that time frame
10 is compressed so you have -- might have only 35 days
11 instead of 210 days. So then you would go through all
12 this trouble to execute this forbearance contract.
13 You would only have a limited window of time to -- to
14 execute it, but during that 35 days, we have the whole
15 allotment to treat at that point in time. So we have
16 enough surface water to treat during that short time
17 frame that we can't take any of this additional
18 forbearance water, so just practically speaking,
19 didn't work out.

20 **Q. Understood. Thank you for that explanation.**
21 **So it's correct then that the El Paso Water does not**
22 **have any forbearance contracts active today?**

23 **A. Correct.**

24 **Q. Okay. I do want to ask you one more question**
25 **about this before we move on. From where the**

1 highlighting stops, the sentence continues down a
2 couple of lines, and then you see the next line down,
3 it says, "Subject to the reservation by the District
4 of 15 percent of the District water forborne by such
5 owners, such reservation by the District being made to
6 insure mitigation of any adverse impact on the
7 District." Do you see that?

8 A. I see that.

9 Q. Okay. Do you know what's meant here by
10 mitigation of any adverse impact on the District?

11 A. No.

12 Q. Okay.

13 MR. KOPP: All right. Let's pull up New
14 Mexico 199. Can you go to the next page? The next
15 page. Okay. This is what I want.

16 Q. (BY MR. KOPP) So, Mr. Balliew, I'm showing you
17 what's been marked as New Mexico Exhibit 199. Do you
18 have that on your screen?

19 A. Yes.

20 Q. Okay. This states it's an amendment to the
21 2001 -- excuse me -- the first amendment to the Rio
22 Grande project implementing third-party contract
23 between the Bureau of Reclamation, EP1, and the El
24 Paso Water. Do you see that?

25 A. I see that.

1 Q. And this is in reference to, I think it says
2 in the second line down, under this amendment it's in
3 reference to the June 11, 2001, contract between those
4 parties, correct?

5 A. Yes. I see that.

6 Q. Okay. Do you recognize this agreement?

7 A. I'm not generally familiar with this
8 particular agreement.

9 Q. Okay. Are you aware that the 2001 contract
10 was amended at a later date?

11 A. Yes.

12 Q. Okay. Turn to Page -- actually, no, this is
13 the correct page. Just need to zoom out. So let's
14 look at that paragraph there up under 9A(1). So this
15 says it replaces Paragraph 9A1 of the 2001 contract
16 with the following, and this is a long sentence, but
17 in the fourth line down, it refers to 1,250 acres. Do
18 you see that?

19 A. Yes.

20 Q. Okay. Mr. Balliew, is it your understanding
21 that the 2001 contract was amended to allow the City
22 to require an additional 1,250 acres of project land
23 as opposed to the original 1,000?

24 A. Yes. Up to 1,250, yes.

25 Q. Sure. Let's look back at New Mexico 202

1 again. So on the left-hand side here below the first
2 subtotal line, it says, "2001 contract city-owned
3 land" towards the middle. Do you see that,
4 Mr. Balliew?

5 A. Yes.

6 Q. And that reflects I think the -- to the left
7 under irrigable land acres, it shows the 1,000 acres
8 there, correct?

9 A. Yes.

10 Q. Okay. And then if you look down four lines
11 on the left, you can see 2010 amendment of the 2001
12 contract. Do you see that?

13 A. I do see that.

14 Q. And to the left of that, it shows 132.6
15 acres. Do you see that?

16 A. Yes.

17 Q. Okay. So it appears that the City of El Paso
18 or at least the El Paso Water Utilities has purchased
19 the maximum number of project acres that are allowed
20 under the existing contracts. Do you agree with that?

21 A. I believe so.

22 Q. Mr. Balliew, do you know when this 2001
23 contract was signed, was there any study done of the
24 impacts to Project return flows of transferring that
25 water to municipal use?

1 A. I'm not aware of any study of that nature.

2 Q. And similarly, when this 2010 amendment was
3 executed we just discussed, are you aware of any
4 studies evaluating the impacts to Project return flows
5 of the City purchasing that additional land?

6 A. I'm not aware of such.

7 Q. Okay. The Project lands that you purchase --
8 excuse me -- that El Paso Water has purchased or
9 leased water from are not supposed to be irrigated,
10 correct?

11 A. That is correct.

12 Q. Okay. Are they allowed to be irrigated with
13 groundwater?

14 A. It is a very rare set of circumstances, and I
15 think it all revolves around something called Gallegos
16 Park where that takes place, but, yes, that's the
17 answer on a very limited set of circumstances.

18 Q. So on Gallegos Park, that is -- consists of
19 lands that are purchased or leased from the project --
20 excuse me -- consists of project lands that are
21 purchased or leased by the City of El Paso?

22 A. Purchased specifically, yes.

23 Q. And that amount of acreage is irrigated?

24 A. Yes.

25 Q. Is that with groundwater or surface water?

1 A. Groundwater.

2 **Q. Okay. So are the -- setting aside Gallegos**
3 **Park, are the other Project lands that El Paso Water**
4 **has purchased or leases water from, are those**
5 **currently fallowed?**

6 A. I'm going to give you another caveat, so I
7 think that there may have been some pecan trees on one
8 of those parcels, and I remember having a discussion
9 about it that I don't know whether those were allowed
10 to go fallow or not, but for the most part, again, the
11 aggregate of all this land that we're talking about is
12 fallowed.

13 **Q. Okay. Do you know approximately how many**
14 **acres were planted with pecans?**

15 A. No, I don't know. Small.

16 **Q. Okay. Does El Paso Water routinely check its**
17 **leased and owned lands to ensure they're not being**
18 **irrigated?**

19 A. Okay. So, yes, so on the land that we own,
20 we do have to do maintenance. We have to cut the
21 grass and the weeds and -- and whatnot. So we do have
22 a regular program where that takes place. On the
23 leased acreage, that's a more complicated situation,
24 because we have thousands of these small tract leases.
25 So we might have a stretch of ditch a couple of blocks

1 long, and there might be 35 or 40 homes on it at which
2 we've leased all of them except maybe four. So we do
3 have to do maintenance to make sure that the ditch is
4 clear so that water can run down to irrigate those
5 customers that retain their water rights, but there
6 are people who take advantage of the system and steal
7 water for irrigating these small tracts after that
8 they have leased the land to El Paso Water so it does
9 take place. And so we do have what we refer to as
10 code compliance officers, so based on a complaint that
11 we receive, which is typically from one of the
12 neighbors that doesn't like it that somebody is
13 stealing the water, then we go out there and attempt
14 to bring the owner into compliance, and if necessary,
15 we have the capability, the authority, that is, to
16 issue a citation.

17 Q. Do I understand your answer correctly that
18 you monitor these lands perhaps incidental to other
19 maintenance you're performing or in response to a
20 complaint, but you don't necessarily have a formal
21 program to go out and check these leased lands to make
22 sure they're not being irrigated?

23 A. Correct.

24 Q. Okay. Do you keep records when you do
25 discover a violation?

1 A. I don't know the answer to that question.

2 Q. Okay. Do you report any violations of this
3 non-irrigation provision that you discover to EP1 or
4 to the Bureau of Reclamation?

5 A. I do not believe that we report it to the
6 Bureau of Reclamation, but we do discuss it with the
7 irrigation district.

8 Q. Okay.

9 A. And sometimes we do get referrals from the
10 irrigation district, as well.

11 Q. Okay. I want to ask you a little bit,
12 Mr. Balliew, about your conservation efforts. You
13 testified to a number of steps that El Paso Water has
14 taken over the last 30 years or so to reduce water
15 use, correct?

16 A. Yes.

17 Q. Does El Paso Water, has it also developed a
18 drought management plan?

19 A. Yes. We have something called a drought -- I
20 think the name is drought and water emergency
21 management plan.

22 Q. I believe that plan has three phases,
23 correct?

24 A. There's three stages of activation, yes.

25 Q. Okay. And the first stage of -- of drought

1 restrictions, that would be the first that would be
2 implemented to conserve water in the event of drought,
3 correct?

4 A. Or -- or a water emergency, yes.

5 Q. Sure. And that stage calls for voluntary
6 reductions in water use, correct?

7 A. Yes. But remember one thing, Mr. Kopp, that
8 El Paso, in our current water conservation program,
9 absent any drought or water emergency, we already have
10 certain things implemented. So we have a time of day,
11 day of week watering restrictions, which apply all the
12 time. So by the time you get to that Stage 1, they're
13 already water conservation measures in place, so it's
14 just additional voluntary conservation measures.

15 Q. Sure. And is it correct, Mr. Balliew, that
16 El Paso Water has never implemented mandatory drought
17 restrictions?

18 A. By "mandatory," you're referring to the Stage
19 3?

20 Q. Is that what Stage 3 would require?

21 A. Yes.

22 Q. Okay. Have you ever implemented Stage 3
23 restrictions?

24 A. No. But we have implemented, as best I
25 recall, the Stage 2 restrictions.

1 **Q.** And what do those consist of?

2 **A.** I don't really remember, but there's some
3 mandatory things in there.

4 **Q.** Okay.

5 **JUDGE MELLOY:** Let me ask you, Mr. Kopp,
6 are you going to be much longer?

7 **MR. KOPP:** I will have more questions,
8 Your Honor. I -- I can't say that I'm going to wrap
9 up in the next 15 minutes or so, so if you want to go
10 ahead and stop for the day, that's fine.

11 **JUDGE MELLOY:** I think we will. I think
12 we're all of our energy is lagging a little bit. I'm
13 sure Mr. Balliew would rather be done today than come
14 back tomorrow, but I think we -- I think it's probably
15 time to take a break, so -- so we'll adjourn for the
16 day and reconvene tomorrow morning. Thank you,
17 everyone.

18 **MR. DUBOIS:** Your Honor, one minor
19 point. You -- when you were entering exhibits
20 earlier, you referred to entering Joint Exhibit 243.
21 It was actually New Mexico 243.

22 **JUDGE MELLOY:** All right. Thank you for
23 that clarification. Anything else? If not, we'll see
24 everybody in the morning. Thank you, everyone.

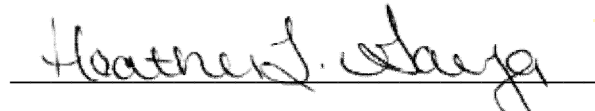
25 (The proceedings adjourned at 4:57 p.m.)

CERTIFICATE

I, HEATHER L. GARZA, a Certified Shorthand Reporter in and for the State of Texas, do hereby certify that the facts as stated by me in the caption hereto are true; that the foregoing pages comprise a true, complete and correct transcript of the proceedings had at the time of the hearing.

I further certify that I am not, in any capacity, a regular employee of any of the parties in whose behalf this status hearing is taken, nor in the regular employ of any of the attorneys; and I certify that I am not interested in the cause, nor of kin or counsel to any of the parties.

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HEATHER L. GARZA, CSR, RPR, CRR
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