

**No. 141, Original**

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**In the**

**SUPREME COURT OF THE UNITED STATES**

---

**STATE OF TEXAS,**

**Plaintiff,**

**v.**

**STATE OF NEW MEXICO and  
STATE OF COLORADO,**

**Defendants.**

---

**OFFICE OF THE SPECIAL MASTER**

---

**THE STATE OF TEXAS'S SUPPLEMENTAL APPENDIX OF EVIDENCE  
IN SUPPORT OF THE STATE OF TEXAS'S MOTION FOR PARTIAL  
SUMMARY JUDGMENT**

---

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February 5, 2021

**THE STATE OF TEXAS'S SUPPLEMENTAL APPENDIX OF EVIDENCE  
IN SUPPORT OF THE STATE OF TEXAS'S MOTION FOR PARTIAL  
SUMMARY JUDGMENT**

<b>Index No.</b>	<b>Description</b>	<b>Bates Beginning</b>	<b>Bates Ending</b>
1	Excerpts of Deposition of Estevan Lopez, February 26, 2020	TX_MSJ_007567	TX_MSJ_007586
2	Excerpts of Deposition of Shane Coors, June 22, 2020	TX_MSJ_007587	TX_MSJ_007602
3	Excerpts of Deposition of Peggy Barroll, July 9, 2020	TX_MSJ_007603	TX_MSJ_007629
4	Excerpts of Deposition of Peggy Barroll, Volume 2, August 7, 2020	TX_MSJ_007630	TX_MSJ_007648
5	Excerpts of Rule 30(b)(6) Deposition of Peggy Barroll, October 21, 2020	TX_MSJ_007649	TX_MSJ_007676
6	Excerpts of Deposition of John D'Antonio, August 14, 2020	TX_MSJ_007677	TX_MSJ_007698
7	Excerpts of Rule 30(b)(6) Deposition of Cheryl Thacker, September 18, 2020	TX_MSJ_007699	TX_MSJ_007718
8	Excerpts of Deposition of John D'Antonio, Volume 1, June 24, 2020	TX_MSJ_007719	TX_MSJ_007737
9	Excerpts of Deposition of Peggy Barroll, Volume 2, February 6, 2020	TX_MSJ_007738	TX_MSJ_007759
10	Excerpts of Deposition of John D'Antonio, Volume 2, June 25, 2020	TX_MSJ_007760	TX_MSJ_007798
11	Excerpts of Deposition of Jennifer Stevens, July 27, 2020	TX_MSJ_007799	TX_MSJ_007830

Dated: February 5, 2021

Respectfully submitted,

s/ Stuart L. Somach

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IN THE SUPREME COURT OF THE UNITED STATES  
BEFORE THE OFFICE OF THE SPECIAL MASTER  
HON. MICHAEL J. MELLO

STATE OF TEXAS	)	
	)	
Plaintiff,	)	
	)	Original Action Case
VS.	)	No. 220141
	)	(Original 141)
STATE OF NEW MEXICO,	)	
and STATE OF COLORADO,	)	
	)	
Defendants.	)	

\*\*\*\*\*

ORAL AND VIDEOTAPED DEPOSITION OF  
ESTEVAN LOPEZ  
FEBRUARY 26, 2020

\*\*\*\*\*

ORAL AND VIDEOTAPED DEPOSITION of ESTEVAN LOPEZ,  
produced as a witness at the instance of the  
Plaintiff, and duly sworn, was taken in the  
above-styled and numbered cause on February 26, 2020,  
from 9:08 a.m. to 4:02 p.m., before Heather L. Garza,  
CSR, RPR, in and for the State of Texas, recorded by  
machine shorthand, at the DRURY PLAZA HOTEL - SANTA  
FE, 820 Paseo De Peralta, Santa Fe, New Mexico,  
pursuant to the Federal Rules of Civil Procedure and  
the provisions stated on the record or attached  
hereto; that the deposition shall be read and signed.

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1 VIDEOPHOTOGRAPHER:

2 Mr. Gary Goldblum

3  
4 ALSO PRESENT:

5 Ms. Peggy Barroll

6 Mr. Jeff Wechsler

7 Mr. Erek Fuchs

8 Mr. Gary Esslinger

9 Ms. Michelle Estrada-Lopez

10 Mr. Ian Ferguson

11 Mr. Al Blair

12 Mr. James Brockmann

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1 THE VIDEOGRAPHER: Good morning. We are  
2 going on the record. The time is 9:08 a.m. Today's  
3 date is February 26th, 2020. Please note that the  
4 microphones are very sensitive and may pick up  
5 whispering, private conversations, and cellular  
6 interference. Please turn off all cellphones or place  
7 them away from the microphones as they can easily  
8 interfere with the deposition's audio. Audio and  
9 video recording will continue to take place unless all  
10 parties agree to go off the record. This begins DVD  
11 No. 1 in the video deposition of Estevan Lopez taken  
12 by the plaintiff in the matter of Texas versus New  
13 Mexico filed in the Supreme Court of the United  
14 States, Case No. 141. This deposition is being held  
15 at the Drury Plaza Hotel located at 828 Paseo De  
16 Peralta, Santa Fe, New Mexico. My name is Gary  
17 Goldblum, certified legal video specialist from The  
18 Video Department. The court reporter is Heather Garza  
19 from Veritext. I am not related to any party in this  
20 action nor am I financially interested in the outcome.  
21 Counsel and all present in the room and everyone  
22 attending remotely will now state their appearances  
23 and affiliations for the record.

24 MS. KLAHN: Sarah Klahn on behalf of the  
25 State of Texas.



1 MR. ROMAN: David Roman on behalf of the  
2 State of New Mexico.

3 MR. WECHSLER: Jeff Wechsler for the New  
4 Mexico State Engineer.

5 MS. DALRYMPLE: Shelly Dalrymple for the  
6 Interstate Stream Commission.

7 MS. BARNCASTLE: Samantha Barncastle for  
8 the Elephant Butte Irrigation District.

9 MR. FUCHS: Erek Fuchs for Elephant  
10 Butte Irrigation District.

11 MR. WALLACE: Chad Wallace for the State  
12 of Colorado.

13 MS. O'BRIEN: Maria O'Brien for El Paso  
14 County Water Improvement District No. 1.

15 MR. GEHLERT: David Gehlert for the  
16 United States.

17 MS. KLAHN: And on the phone?

18 MR. GOLDSBERRY: Francis Goldsberry for  
19 the State of Texas.

20 MR. RICH: Chris Rich, Solicitor's  
21 Office, Department of the Interior.

22

23

24

25

1 ESTEVAN LOPEZ,  
2 having been first duly sworn, testified as follows:

3 E X A M I N A T I O N

4 BY MS. KLAHN:

5 Q. Good morning, Mr. Lopez.

6 A. Good morning.

7 Q. We're back for day two of your deposition,  
8 this time on your expert report. I can go over the  
9 deposition guidelines if you're feeling like you can't  
10 really remember how to handle a deposition.

11 A. I think I'm fine.

12 Q. You think you're fine. Okay. Very good.  
13 Why don't you state your name for the record.

14 A. My name is Estevan Lopez.

15 Q. And your work address?

16 A. P.O. Box 302, Penasco, New Mexico.

17 MS. KLAHN: Mark this.

18 (Exhibit No. 1 was marked.)

19 MS. KLAHN: For everybody in the room, I  
20 only brought eight copies, so you are going to have to  
21 figure it out.

22 MR. ROMAN: Sarah, are we continuing the  
23 numbers from the last time or are we starting new?

24 MS. KLAHN: Starting over.

25 MR. ROMAN: Okay.

1           Q.     So let's start with historic practice.  What  
2     do you mean by that?

3           A.     I mean that largely beginning in the early  
4     '50s, during -- during a -- the '50s drought, as  
5     surface water became increasingly scarce, farmers  
6     began to use groundwater to supplement surface  
7     supplies, and Reclamation -- Reclamation arguably  
8     encouraged it.  They certainly recognized it, and in  
9     some instances, I think they facilitated it.  That  
10    sort of groundwater use to supplement surface supply  
11    happened throughout the project, both in New Mexico  
12    and Texas, and it continues until today.

13          Q.     So how is that -- describe -- maybe I --  
14    maybe we're not talking in the same terms here.  
15    Describe your definition of conjunctive use of  
16    groundwater to meet irrigation demands.  What does  
17    that even mean?

18          A.     I mean, meeting the crop irrigation demand by  
19    a combination of surface water and groundwater, and  
20    more specifically, to -- I would say using surface  
21    water first as -- as primary source and then backing  
22    that up with groundwater to make up the deficit.

23          Q.     So in this definition you just gave me, when  
24    groundwater is used to make up the deficit of  
25    inadequate amounts of surface water, is groundwater

1 then project water in your view?

2 A. No.

3 Q. Why not?

4 A. I think the -- I think project water is, as  
5 I've defined in -- in my -- in my report, project  
6 water is releases of usable water from Elephant Butte  
7 and Caballo, return flows and inflows between --  
8 inflows below Caballo Reservoir.

9 Q. But if inflows below Caballo Reservoir are  
10 being pumped by New Mexico wells, how is that not  
11 pumping project water?

12 A. Could you please repeat that, please?

13 Q. If inflows and return flows below Caballo  
14 Reservoir -- let's stick with return flows. If return  
15 flows below Caballo Reservoir, based on use of surface  
16 water from the project, are being pumped by New Mexico  
17 wells, how is that not pumping project water?

18 MR. ROMAN: Object to form.

19 A. I apologize. I'm still not following you.  
20 Are you suggesting that we're -- we're pumping the  
21 return flows from wells? Is that what you're saying?

22 Q. (BY MS. KLAHN) Right.

23 A. I don't think that happens generally. I  
24 mean, arguably, you can argue that return flows aren't  
25 showing up as a result of some of the groundwater

1 pumping. That, I would agree with. I don't think  
2 that generally we pump the return flows out of wells.

3 Q. So if the return flows aren't showing up  
4 because of groundwater pumping, why isn't that pumping  
5 project water effectively?

6 A. Well, certainly groundwater pumping can have  
7 an impact on project supply. I'm not saying that  
8 it -- that that's not the case. If that's what you're  
9 asking, yeah, I can agree with you on that.

10 Q. But it remains your position that it's not  
11 project water?

12 A. I -- it remains my position that groundwater  
13 is not project water. That's correct.

14 Q. Could you describe for me what your Paragraph  
15 4.7 on Page 6 is getting at?

16 A. How much detail do you want?

17 Q. Well, I guess as much as you need without you  
18 reading from your report.

19 A. Do you not want me to read from my report?

20 Q. You may read your report, but you don't need  
21 to read it into the record. I'm asking you to  
22 summarize.

23 A. Okay. In 2011, 2011 was a very dry year, and  
24 there was very little inflow into -- into project  
25 storage. In part, or, I guess, completely as a result

1 of the 2008 operating agreement, there -- there were  
2 now carryover accounts for each of the districts, and  
3 the 2008 operating agreement and the diversion ratio  
4 mechanism that it uses to establish the D3 allocation,  
5 those things set up a situation in which -- I think  
6 that the allocation committee -- the allocation  
7 committee allocated water before they, I think, fully  
8 understood what the diversion ratio was going to be in  
9 that year, and as a result, I think they -- they  
10 allocated essentially more water than was available.  
11 Once the -- once it became apparent just how poor the  
12 diversion ratio was, how poor the system efficiency  
13 was because of the low inflows and low -- low water  
14 supply, it turned out that there wasn't enough water  
15 in the carryover accounts. There were accounts there,  
16 but there weren't -- there wasn't water to back them  
17 up. So much of the water that has been previously  
18 allocated now went to simply filling those carryover  
19 accounts. And those carryover accounts were quite  
20 lopsided. El Paso -- El Paso No. 1 had a fairly large  
21 carryover account. EBID had a very small carryover  
22 account. As a result of all of these things, Texas  
23 became quite interested in -- in -- and at the same  
24 time, New Mexico had a -- a substantial accrued credit  
25 that we had built up over a number of years. So Texas

1 became quite interested in a relinquishment of some of  
2 those accrued credits to supplement the available  
3 supply to the districts, and we were working with them  
4 on -- on -- on those issues. When I say "we" here,  
5 I'm -- I was working with -- with ISC at that time so  
6 I'm talking about New Mexico and our water  
7 administration team, including the state engineer. We  
8 realized that if we did the relinquishment, as Texas  
9 was requesting, most, if not all, of this water was  
10 essentially going to go in to simply filling EP No. 1  
11 carryover accounts and little, if any, of this water  
12 was going to end up being made available to EBID. As  
13 you know, EBID -- EBID farmers are New Mexico  
14 residents, and state engineer in particular was -- was  
15 wanting to assure that they -- that if we made some of  
16 our water available, that they would get a portion of  
17 it. And he -- he was negotiating from that  
18 perspective. That wasn't acceptable to the Texas  
19 commissioner, so we -- we talked through various other  
20 options but were unable to -- to get to an agreement,  
21 and at some point, the water that had been allocated  
22 previously was running out and -- and New Mexico -- we  
23 became aware that Reclamation and the district --  
24 districts were talking about releasing water that in  
25 our estimation was releasing our credit water. We

S I G N A T U R E    O F    W I T N E S S

I, ESTEVAN LOPEZ, solemnly swear or affirm under  
the pains and penalties of perjury that the foregoing  
pages contain a true and correct transcript of the  
testimony given by me at the time and place stated  
with the corrections, if any, and the reasons therefor  
noted on the foregoing correction page(s).

A handwritten signature in cursive script, appearing to read 'Estevan Lopez', is written over a horizontal line.

ESTEVAN LOPEZ

Job No. 3852996



# WITNESS CORRECTIONS AND SIGNATURE

Please indicate changes on this sheet of paper, giving the change, page number, line number and reason for the change. Please sign each page of changes.

PAGE/LINE	CORRECTION	REASON FOR CHANGE
-----------	------------	-------------------

15/13	strike "us"	- extraneous word
-------	-------------	-------------------

15/24	replace "in" with "and"	- incorrect word
-------	-------------------------	------------------

16/3	insert "Compact" before "accounting" and add "g" after "accounting"	- Clarity
------	---	-----------

18/21	strike "government"	- extraneous / incorrect
-------	---------------------	--------------------------

18/25	insert "New Mexico" before second "Compact"	- Clarity
-------	---	-----------

19/1	capitalize <u>U</u> pper	- Proper name
------	--------------------------	---------------

20/11	strike "state"	- clarity
-------	----------------	-----------

32/9	replace "and" with "in"	- incorrect word
------	-------------------------	------------------

33/14	replace "make" with "sell"	- clarity
-------	----------------------------	-----------

33/16	replace "it" with "effluent"	- clarity
-------	------------------------------	-----------

41/21	replace second "a" with "an" and insert "g" after disagreement	- clarity
-------	--	-----------

44/7	replace "they" with "the Commission"	- clarity
------	--------------------------------------	-----------

44/9	replace "we" with "New Mexico"	- clarity
------	--------------------------------	-----------

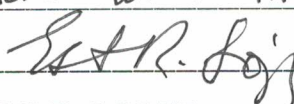
45/9 and 10	replace "couldn't" with "could" (2 occurrences)	- wrong word
-------------	---	--------------

47/23	replace "being" with "been"	- incorrect word
-------	-----------------------------	------------------

60/18	replace "it" with "waste" and "It's" with "Water is"	- clarity
-------	--	-----------

74/1	replace "were" with "are"	- clarity
------	---------------------------	-----------

75/4	replace "there" with "then"	- clarity
------	-----------------------------	-----------

  
ESTEVAN LOPEZ

Job No. TX3852996

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# WITNESS CORRECTIONS AND SIGNATURE

Please indicate changes on this sheet of paper, giving the change, page number, line number and reason for the change. Please sign each page of changes.

PAGE/LINE	CORRECTION	REASON FOR CHANGE
-----------	------------	-------------------

75/16	replace "model" with "modeling"	- clarity
78/15	insert "--" after "super"	- clarity
78/23	replace second occurrence of "it" with "ISC"	- incorrect word
81/19	insert "," after "forth"	- clarity
90/16	replace "effect" with "affect"	- incorrect word
94/7	replace "El Vado" with "Lobatos"	- incorrect name
112/17	replace "effect" with "affect"	- incorrect word
112/23	replace "effect" with "affect"	- incorrect word
114/9 and 10	replace "gained" with "gamed" (2 occurrences)	- incorrect word
114/14	replace first occurrence of "of" with "in"	- clarity
114/15	replace "what" with "one"	- incorrect word
114/17	replace "500" with "500,000"	- clarity
115/3 and 4	replace "effect" with "affect" (2 occurrences)	- incorrect word
115/7 and 8	replace "effect" with "affect" (3 occurrences)	- incorrect word
115/22	strike second occurrence of "by"	- clarity
116/1	replace "effect" with "affect"	- incorrect word
116/18	replace "gain" with "game"	- incorrect word
118/8	replace "effect" with "affect"	incorrect word

ESTEVAN LOPEZ

Job No. TX3852996

165 ERL  
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WITNESS CORRECTIONS AND SIGNATURE

Please indicate changes on this sheet of paper, giving the change, page number, line number and reason for the change. Please sign each page of changes.

PAGE/LINE	CORRECTION	REASON FOR CHANGE
-----------	------------	-------------------

118/9	insert "going into effect" after "articles" and	
	replace "790" with "790,000"	- clarity

122/6	strike "and"	- clarity
-------	--------------	-----------

125/5	replace "Mesillas" with "Mesilla"	- incorrect name
-------	-----------------------------------	------------------

125/15	replace second occurrence of "in" with "by"	- clarity
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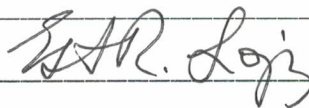
125/16	strike "New"	- incorrect entity
--------	--------------	--------------------

133/16	replace "allure" with "lore"	- incorrect word
--------	------------------------------	------------------

158/13	replace "actual" with "actually"	- incorrect word
--------	----------------------------------	------------------

158/14	replace first two occurrences of "I" with "they"	- clarity
--------	--	-----------

16/23	replace "did n't" with "did"	- incorrect statement
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ESTEVAN LOPEZ

Job No. TX3852996

166 ePL  
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IN THE SUPREME COURT OF THE UNITED STATES  
BEFORE THE OFFICE OF THE SPECIAL MASTER  
HON. MICHAEL J. MELLOY

STATE OF TEXAS	)	
	)	
Plaintiff,	)	
	)	Original Action Case
VS.	)	No. 220141
	)	(Original 141)
STATE OF NEW MEXICO,	)	
and STATE OF COLORADO,	)	
	)	
Defendants.	)	

THE STATE OF TEXAS :  
COUNTY OF HARRIS :

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 above and foregoing answers of the witness, ESTEVAN LOPEZ, to the interrogatories as indicated were made before me by the said witness after being first duly sworn to testify the truth, and same were reduced to typewriting under my direction; that the above and foregoing deposition as set forth in typewriting is a full, true, and correct transcript of the proceedings had at the time of taking of said deposition.

I further certify that I am not, in any capacity, a regular employee of the party in whose



1       behalf this deposition is taken, nor in the regular  
2       employ of this attorney; and I certify that I am not  
3       interested in the cause, nor of kin or counsel to  
4       either of the parties.

5  
6               That the amount of time used by each party at  
7       the deposition is as follows:

8               MS. KLAHN - 04:42:44

              MR. ROMAN - 00:00:00

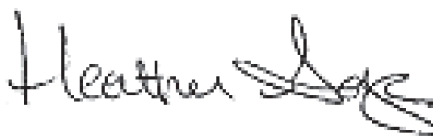
9               MR. GEHLERT - 00:00:00

              MR. WALLACE - 00:00:00

10              MS. O'BRIEN - 00:00:00

              MS. BARNCASTLE - 00:00:00

11  
12              GIVEN UNDER MY HAND AND SEAL OF OFFICE, on  
13       this, the 27th day of March, 2020.

14                               

15               HEATHER L. GARZA, CSR, RPR, CRR

              Certification No.: 8262

16               Expiration Date: 04-30-22

              VERITEXT LEGAL SOLUTIONS

17               Firm Registration No. 571

              300 Throckmorton Street, Suite 1600

18               Fort Worth, TX 76102

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1 droman@roblesrael.com

2 March 27, 2020

3 RE: Texas v. New Mexico

4 DEPOSITION OF: Estevan Lopez (# 3852996)

5 The above-referenced witness transcript is  
6 available for read and sign.

7 Within the applicable timeframe, the witness  
8 should read the testimony to verify its accuracy. If  
9 there are any changes, the witness should note those  
10 on the attached Errata Sheet.

11 The witness should sign and notarize the  
12 attached Errata pages and return to Veritext at  
13 errata-tx@veritext.com.

14 According to applicable rules or agreements, if  
15 the witness fails to do so within the time allotted,  
16 a certified copy of the transcript may be used as if  
17 signed.

18 Yours,

19 Veritext Legal Solutions  
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23  
24  
25

IN THE SUPREME COURT OF THE UNITED STATES  
BEFORE THE OFFICE OF THE SPECIAL MASTER  
HON. MICHAEL J. MELLO

STATE OF TEXAS	)	
	)	
Plaintiff,	)	
	)	Original Action Case
VS.	)	No. 220141
	)	(Original 141)
STATE OF NEW MEXICO,	)	
and STATE OF COLORADO,	)	
	)	
Defendants.	)	

\*\*\*\*\*

REMOTE ORAL AND VIDEOTAPED DEPOSITION OF  
SHANE COORS  
JUNE 22, 2020

\*\*\*\*\*

REMOTE ORAL AND VIDEOTAPED DEPOSITION of SHANE COORS, produced as a witness at the instance of the Defendant State of New Mexico, and duly sworn, was taken in the above-styled and numbered cause on June 22, 2020, from 9:01 a.m. to 5:07 p.m., before Heather L. Garza, CSR, RPR, in and for the State of Texas, recorded by machine shorthand, at the offices of HEATHER L. GARZA, CSR, RPR, The Woodlands, Texas, pursuant to the Federal Rules of Civil Procedure and the provisions stated on the record or attached hereto; that the deposition shall be read and signed.

## A P P E A R A N C E S

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19 VIDEOGRAPHER:

20 Ms. Kayla Brown

21 ALSO PRESENT:

22 Al Blair  
23 Steve Setzer  
24 Ian Ferguson  
25 John Carron  
Jean Moran  
Greg Sullivan

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1 THE VIDEOGRAPHER: The time is 9:01 a.m.  
2 We're on the record.

3 SHANE COORS,  
4 having been first duly sworn, testified as follows:

5 E X A M I N A T I O N

6 BY MR. KOPP:

7 Q. Good morning, Mr. Coors. How are you today?

8 A. Fine. Thanks. Good morning.

9 Q. Just as a reminder, my name is Michael Kopp,  
10 and I'm an attorney representing the State of New  
11 Mexico in the case Texas v. New Mexico, and I'll be  
12 taking your deposition today.

13 MR. KOPP: We'll go ahead and enter our  
14 appearances on the record. As I said, I'm Michael  
15 Kopp for New Mexico. I also see on the call Jeff  
16 Wechsler, John Draper, and Lisa Thompson for New  
17 Mexico, as well as Steve Setzer, John Carron, and Greg  
18 Sullivan. Did I miss anyone else who is on the call  
19 for New Mexico?

20 (No response.)

21 MR. KOPP: Okay. And for Texas?

22 MS. BARFIELD: Good morning. This is  
23 Theresa Barfield on behalf of the State of Texas.  
24 Also with me this morning, I have Stuart Somach,  
25 Francis Goldsberry, and Robert Hoffman.

1           Q.    So I think last week, you made this  
2 disclosure of modeling files and then New Mexico came  
3 back and asked for some additional files. I think  
4 that they were not named in the way that the New  
5 Mexico experts were expecting, so I just wanted to ask  
6 and -- and confirm some things about that. So they  
7 asked -- they wanted to know if the base dot MAM file  
8 is your name file?

9           A.    Well, I -- I know the question that you're  
10 asking, because when we got that question, it struck  
11 me as -- I would not have expected that question to  
12 come because we thought that those files would be the  
13 same as what was done in Run 1. So that is something  
14 that I don't have an answer to that, why that name was  
15 different, because when I went into that folder, you  
16 know, that's what -- that's what we have.

17          Q.    Okay.

18          A.    What I disclosed is what we have. And so,  
19 you know, maybe that means we need to dig more into  
20 that to get a satisfactory answer to that question,  
21 but that's what we had in that folder as far as the  
22 name file, so that's what we used.

23          Q.    Okay. I'm not sure that you didn't disclose  
24 what was needed. I think one issue was that some of  
25 the files, they expected to be named base and then

1 have different extensions, like dot RIP.

2 A. Right. Right.

3 Q. When you sent them, they -- they were instead  
4 named historic dot RIP, for example.

5 A. Right.

6 Q. So the question was, you know, if -- were  
7 those -- I mean, if they renamed those files to  
8 base -- like, base dot RIP, is that correct, do they  
9 make a correct assumption in doing that?

10 A. Yeah. And that -- I mean, that's a fair  
11 question that I probably can't give you the right  
12 answer for that here and now, but certainly owe that  
13 to you.

14 Q. Okay. Well, we can work that out after the  
15 deposition.

16 A. Okay.

17 Q. So looking back at your report here, and I'm  
18 looking specifically here at Figures 19 and 20, which  
19 are on Page 38. I think this is where you're showing  
20 the impacts of your Run A at the -- the first one,  
21 Figure 19 is the Caballo outflow -- excuse me -- and  
22 Figure 20 is the -- the annual Rio Grande at El Paso  
23 flow, correct?

24 A. Right.

25 Q. And I think your general conclusion,

1 obviously, is that the impacts of -- of both of these  
2 locations are -- are relatively small, particularly on  
3 an average annual basis, correct?

4 A. Right.

5 Q. Although, I will point out that in some  
6 years, for example, 2004, it appears that there are  
7 some larger deviations. Do you recall what the  
8 maximum negative departure you observed at either of  
9 these locations was?

10 A. I don't recall, but the spreadsheet I  
11 disclosed should have that pretty readily available,  
12 yeah.

13 Q. Sure. And did you look at the modeled  
14 impacts at any other points besides the Caballo  
15 outflow and the Rio Grande at El Paso?

16 A. No.

17 Q. Okay. Is there a particular reason why not?

18 A. Well, like I think I said at the beginning,  
19 these are the points, especially the Rio Grande at El  
20 Paso, I felt best about from a modeling standpoint,  
21 and relying on the other Texas experts, the impacts at  
22 El Paso are -- are the important impacts, so that's  
23 what I characterized.

24 Q. So the top of Page 39, before your  
25 references, I think it's actually the last sentence



1 here in your report before the references, you say,  
2 "The pumping in the Hueco Bolson resulted in  
3 differences in the annual releases from Caballo and  
4 the flows at El Paso of 1.7 percent and 2.2 percent  
5 respectively on an absolute basis, and the changes  
6 were essentially unbiased, meaning that they were  
7 equally often increased as decreased." So I think  
8 what you're saying there is that even though there  
9 were negative departures in some years, there were  
10 positive departures in other years?

11 A. Right.

12 Q. And that these changes were essentially -- I  
13 mean, by unbiased, do you truly mean they were  
14 basically random?

15 A. Well, just means that I -- I didn't put the  
16 numbering here, but when you do basically the mean  
17 average that it's close to zero.

18 Q. Okay.

19 A. That -- that the sum of the positives and the  
20 negatives very nearly cancelled out to zero.

21 Q. Okay.

22 A. So that -- that's what I mean by that.

23 Q. The difference is 1.7 percent and 2.2  
24 percent, you say that's on an absolute basis so that's  
25 both the positive and the negative departures?

1           A.     That's the absolute deviation, so that's --  
2     forget positive and negative. Everything is positive.  
3     What's the average deviation in any direction is this  
4     that's the 1.7 or 2.2. The mean deviation is much,  
5     much less.

6           **Q.     Okay. All right. I think I have no further**  
7     **questions for you, Mr. Coors, at this time.**

8           A.     Okay.

9                   **MR. KOPP:** Does anyone else have any  
10    questions? Is anyone else still listening?

11                   **MR. WALLACE:** None for Colorado.

12                   **MS. BARFIELD:** Okay. I think we're  
13    done.

14                   **MR. KOPP:** All right. Thank you very  
15    much for your time today, Mr. Coors. I appreciate it.

16                   THE WITNESS: Thank you, too.  
17    Appreciate it.


18                   THE VIDEOGRAPHER: The time is 5:07 p.m.  
19    We're off the record.

20                           (The deposition concluded at 5:07 p.m.)  
21  
22  
23  
24  
25

## WITNESS CORRECTIONS AND SIGNATURE

Please indicate changes on this sheet of paper, giving the change, page number, line number and reason for the change. Please sign each page of changes.

PAGE/LINE	CORRECTION	REASON FOR CHANGE
60/7	change "wasn't" to "was"	incorrectly transcribed
74/22	add a "why" between "than" and "we"	incorrectly transcribed
111/22	change "ARC" to "art"	incorrectly transcribed
120/7	change "1.4" to ".14"	incorrectly transcribed
150/18	remove the "the" between "measuring" and "statistic"	same
151/1	change "tiny" to "tidy"	incorrectly transcribed
151/9	change "stall" to "fall"	incorrectly transcribed
171/3	change "flex" to "complex"	incorrectly transcribed
175/10	change "weather" to "seepage"	incorrectly transcribed
178/25	add an "if" after "happened"	incorrectly transcribed
190/12	change "slot" to "slop"	incorrectly transcribed

  
SHANE COORS

## SIGNATURE OF WITNESS

I, SHANE COORS, solemnly swear or affirm under the pains and penalties of perjury that the foregoing pages contain a true and correct transcript of the testimony given by me at the time and place stated with the corrections, if any, and the reasons therefor noted on the foregoing correction page(s).

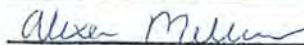


SHANE COORS

State of Colorado  
County of LaRimer

The foregoing instrument was acknowledged before me on this 6 day of August, 2020 by Shane Coors who is personally known to me or has produced Colorado Drivers License as Identification

Job No. 63555

  
Notary's Signature

**ALEXA MALARA**  
**NOTARY PUBLIC**  
**STATE OF COLORADO**  
**NOTARY ID 20194023300**  
**MY COMMISSION EXPIRES 06/19/2023**

IN THE SUPREME COURT OF THE UNITED STATES  
 BEFORE THE OFFICE OF THE SPECIAL MASTER  
 HON. MICHAEL J. MELLO

STATE OF TEXAS	)	
	)	
Plaintiff,	)	
	)	Original Action Case
VS.	)	No. 220141
	)	(Original 141)
STATE OF NEW MEXICO,	)	
and STATE OF COLORADO,	)	
	)	
Defendants.	)	

THE STATE OF TEXAS :  
 COUNTY OF HARRIS :

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 above and foregoing answers of the witness, SHANE COORS, to the interrogatories as indicated were made before me by the said witness after being first remotely duly sworn to testify the truth, and same were reduced to typewriting under my direction; that the above and foregoing deposition as set forth in typewriting is a full, true, and correct transcript of the proceedings had at the time of taking of said deposition.

I further certify that I am not, in any capacity, a regular employee of the party in whose

1 behalf this deposition is taken, nor in the regular  
2 employ of this attorney; and I certify that I am not  
3 interested in the cause, nor of kin or counsel to  
4 either of the parties.

5  
6 That the amount of time used by each party at  
7 the deposition is as follows:

8 MR. KOPP - 06:10:54


MS. BARFIELD - 00:00:00

9 MR. DUBOIS - 00:00:00

MR. WALLACE - 00:00:00

10 MS. O'BRIEN - 00:00:00

11  
12 GIVEN UNDER MY HAND AND SEAL OF OFFICE,  
13 this, the 19th day of July, 2020.

14 

HEATHER L. GARZA, CSR, RPR, CRR

Certification No.: 8262

Expiration Date: 04-30-22

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IN THE SUPREME COURT OF THE UNITED STATES  
BEFORE THE OFFICE OF THE SPECIAL MASTER  
HON. MICHAEL J. MELLO

STATE OF TEXAS	)	
	)	
Plaintiff,	)	
	)	Original Action Case
VS.	)	No. 220141
	)	(Original 141)
STATE OF NEW MEXICO,	)	
and STATE OF COLORADO,	)	
	)	
Defendants.	)	

\*\*\*\*\*

REMOTE ORAL AND VIDEOTAPED DEPOSITION OF  
PEGGY BARROLL  
JULY 9, 2020

\*\*\*\*\*

REMOTE ORAL AND VIDEOTAPED DEPOSITION of PEGGY BARROLL, produced as a witness at the instance of the Plaintiff State of Texas, and duly sworn, was taken in the above-styled and numbered cause on July 9, 2020, from 10:01 a.m. to 4:03 p.m., before Heather L. Garza, CSR, RPR, in and for the State of Texas, recorded by machine shorthand, at the offices of HEATHER L. GARZA, CSR, RPR, The Woodlands, Texas, pursuant to the Federal Rules of Civil Procedure and the provisions stated on the record or attached hereto; that the deposition shall be read and signed.

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5 VIDEOGRAPHER:

6 Ms. Kayla Brown

7 ALSO PRESENT:

8 Al Blair

9 Phil King

10 Gary Esslinger

Ian Ferguson

11 Michelle Estrada-Lopez

Rolf Schmidt-Petersen

12 Lela Hunt

Shelly Dalrymple

13 Susan Barela

## EXAMINATION INDEX

**WITNESS:** PEGGY BARROLL

EXAMINATION

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BY MR. SOMACH

7

SIGNATURE REQUESTED

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## EXHIBIT INDEX

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State of Texas's Notice of Deposition  
and Subpoena for Personal Appearance of  
Peggy Barroll and Request for Production  
of Documents

MB EXHIBIT NO.2

11

Report on Studies of Rio Grande Channel  
Losses from International Dam to  
Riverside Canal Heading

MB EXHIBIT NO.3

13

Letter dated August 26, 1937

MB EXHIBIT NO.4

15

Letter dated February 27, 1964

MB EXHIBIT NO.5

17

Map of Drain System in EP No. 1

MB EXHIBIT NO.6

18

Letter dated October 12, 1940

MB EXHIBIT NO.7

19

Invoices

MB EXHIBIT NO.8

24

Expert Report of Margaret Barroll,  
Ph.D., dated October 31, 2019

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MB EXHIBIT NO.9	86
United States Department of the Interior Geological Survey dated October 23, 1947	
MB EXHIBIT NO.10	129
Active Water Resource Management in the Lower Rio Grande Tools for a New Era in Water Management PowerPoint Presentation	

1                   **THE VIDEOGRAPHER:** The time is 10:01  
2 a.m. We're on the record.

3                   PEGGY BARROLL,  
4 having been first duly sworn, testified as follows:

5                   E X A M I N A T I O N

6 BY MR. SOMACH:

7           Q.     So I guess we have demonstrated the first  
8 issue or problem with remote depositions, and that's  
9 because we can't see each other quite as well as we  
10 can when we're in the same room, we tend to talk over  
11 one another so, let's -- Dr. Barroll, I'll try to wait  
12 after I answer -- or after I ask a question, if you'll  
13 wait before you respond, and we'll see if we can do  
14 this so that we don't talk at the same time. Is  
15 that -- is that okay with you?

16          A.     I'll try my best.

17          Q.     Okay. You -- I know you've had your  
18 deposition taken before because I sat in on at least  
19 two days of those. These remote depositions are very  
20 similar to the one that we took when we were in Santa  
21 Fe. The exception, of course, is the fact that we're  
22 not in the same room and so that we know to  
23 accommodate that fact, so I want to make sure that you  
24 don't have any other devices open where you're  
25 communicating with -- with anybody else. Have you

1 what we've talked about previously and that is all the  
2 other factors, whatever is happening in Texas with  
3 groundwater pumping and accounting -- and so forth.

4 Is that what you're talking about there?

5 A. Yes.

6 Q. And, again, part of -- well, let me just  
7 leave it there. Take a look at Page 44, 6.3.3, to the  
8 end, that whole section.

9 A. Yes.

10 Q. So that -- that's not an expert opinion, is  
11 it?

12 MR. WECHSLER: Object to form.

13 A. It might be getting into factual matters that  
14 are not entirely expert. I'm not sure. I --

15 Q. (BY MR. SOMACH) Let me ask --

16 A. I'm not quite sure where the -- where the  
17 line gets in some areas. My knowledge of what EBID's  
18 view of the operating agreement was based on my  
19 conversations with them and materials available to me.

20 Q. Would -- would EBID be a better source of  
21 what EBID's views of the operating agreement are in  
22 your opinion?

23 A. Yes.

24 Q. Take a look at Roman numeral 11, the page  
25 Roman numeral 11. Page -- Page -- Conclusion 16.

1           A.     Yeah.

2           **Q.     Tell me what -- what you intend to convey in**  
3 **that conclusion.**

4           A.     That the effect of the operating agreement,  
5 when you combine the reduction in -- in recharge to  
6 the aquifer and the increase in groundwater pumping  
7 associated with the change in EBID's allocation,  
8 combine those two impacts to the aquifer, they add up  
9 to more than a hundred thousand acre-feet per year in  
10 full supply years, and that's a hundred thousand  
11 acre-feet to the bad as far as the aquifer is  
12 concerned of less recharge and more discharge, and as  
13 a result, groundwater levels have been declining, and  
14 they decline naturally in years of low supply. That's  
15 always been the case. But since the change in  
16 allocation in 2006, we have not seen recovery in the  
17 intervening full supply years.

18          **Q.     If you're attempting to remediate that**  
19 **situation, and I -- I assume that you're -- the**  
20 **implication is if EBID got more surface water, it**  
21 **would remediate the situation; is that what you're**  
22 **saying?**

23          A.     I'd say the reduction in EBID's allocation  
24 has caused this problem. A re -- getting some  
25 water -- getting EBID some water back would certainly

1 help remediate it.

2 **Q. What about turning off wells, just not**  
3 **pumping groundwater wells, would that help remediate**  
4 **the situation?**

5 A. Reduction in groundwater pumping -- in order  
6 to have a reduction in groundwater pumping, that would  
7 require a reduction in groundwater demand, either  
8 people moving out of the basin or a reduction of  
9 irrigated acreage in the basin.

10 **Q. Correct.**

11 A. Either of those would have some remedy --  
12 remedial effects on this problem.

13 **Q. You're saying they would have a remedial**  
14 **effect?**

15 A. They would.

16 **Q. On Page 17, you've got a description of the**  
17 **hydrologic cycle, and if you -- you look forward to**  
18 **the second page, 18, you focus on the -- the El Paso**  
19 **Valley and drains and so forth. Do you see that?**

20 A. Yeah.

21 **Q. How does pumping -- and when you talk about**  
22 **pumping in El Paso Valley, you're talking about the**  
23 **Hueco Bolson; is that correct?**

24 A. Yeah. The El Paso Valley is sort of a subset  
25 of the Hueco Bolson.



1           **Q.    Okay.    So take me through the analysis.    How**  
2 **does groundwater pumping in -- in the Hueco affect**  
3 **surface water in -- in the project?**

4           **A.    There are two effects.    One is it depletes**  
5 **the drain flows above Fabens, and those drain flows**  
6 **were historically part of project supply -- before**  
7 **rectification, all drain flows of Fabens were part of**  
8 **project supply.    Following rectification, the water**  
9 **from the river drain system, middle drain, were used**  
10 **as project supply.    Groundwater pumping depletes the**  
11 **drains and reduces the amount of project supply**  
12 **generated within the El Paso Valley.    The other effect**  
13 **is increase in seepage from EP No. 1 canals and the**  
14 **main stem of the Rio Grande.    Losses from the Rio**  
15 **Grande are before the Riverside canal extension --**  
16 **sorry, before the American canal extension allowed EP**  
17 **No. 1 to bypass that reach, presumably be losses to**  
18 **the -- to the project water in the main stem of the**  
19 **Rio Grande above Riverside canal.    Those losses were**  
20 **increasing at the time as groundwater pumping impacted**  
21 **the groundwater levels in that area, reducing the**  
22 **amount of project supply.**

23           **Q.    Did you -- have you done an analysis of the**  
24 **historic groundwater levels within the Hueco Bolson?**

25           **A.    I've not done an analysis.**

1           **Q.    So -- so do you know -- I think either you**  
2           **said this or Mr. Lopez said this, but the Hueco Bolson**  
3           **is -- is unconnected with the river; is that correct?**

4           **A.    Yeah, groundwater levels in the El Paso area**  
5           **have dropped so low that they essentially disconnected**  
6           **the river, which means that -- again, I'm not an**  
7           **expert in the Hueco, but theoretically, what that**  
8           **means is that maxed out the loss rate, that the loss**  
9           **rate from that -- from the bed of the Rio Grande in a**  
10          **reach would increase with time as the groundwater**  
11          **levels dropped until they dropped below a certain**  
12          **threshold and then the -- the loss rate would stay**  
13          **constant at that large rate.**

14          **Q.    Do you know when that disconnection took**  
15          **place? Did -- did it take place -- it was connected**  
16          **up until the operating agreement and then it**  
17          **disconnected; is that -- is that correct?**

18          **A.    No. I assume it happened well before that,**  
19          **but that big cone of depression in the El Paso Valley**  
20          **didn't happen recently.**

21          **Q.    Give me a -- in terms of relative time, did**  
22          **it -- did it exist in 1938?**

23          **A.    I don't think so.**

24          **Q.    You think it was connected in 1938?**

25          **A.    Well, the City of El Paso was only pumping**

1 about 10,000 acre-feet a year back then. I don't  
2 think there was a big -- again, you'd have to talk to  
3 our Hueco experts, Chuck Spalding or Dan Morrissey,  
4 for more detail on that.

5 **Q. Okay. And so you're not purporting to be an**  
6 **expert on the Hueco Bolson; is that correct?**

7 A. No. I know enough from my readings and  
8 studies and -- and reading the expert reports of Dan  
9 Morrissey and Chuck Spalding, I know enough to support  
10 what I'm saying, but I'm not an expert on the Hueco  
11 itself.

12 **Q. And if I wanted to know the effect that**  
13 **groundwater pumping in the Hueco has on surface water**  
14 **supplies, I assume I have to ask Spalding or**  
15 **Morrissey; is that correct?**

16 A. If you want to get detailed about it, yes.

17 **Q. All you're providing is some general**  
18 **knowledge based upon your anecdotal review of**  
19 **materials; is that correct?**

20 A. I think I also provide one of their -- a  
21 figure from their report, but that's in my rebuttal  
22 exhibit.

23 **Q. It is from their report; is that correct?**

24 A. Yes. It is. There's also -- I don't want  
25 to -- this is a subject that's been discussed in the

1 literature, scientific literature, so there are other  
2 studies that I've read, modeling studies of the Hueco  
3 Bolson, discussions of the salvage for the American  
4 canal extension, including one done by Dr. Blair in  
5 which this subject is discussed and sometimes  
6 quantified.

7 Q. If I could have you take a look again at --  
8 or look at Page 23. You have a discussion at the top  
9 starting at the top of Page 23, and then you have the  
10 chart, hydrologic cycle, and what I -- I'm curious  
11 about is does that chart describe accurately -- I know  
12 it's in schematic form, but is the story you're  
13 telling there a story about what happened in the  
14 Rincon and Mesilla valleys?

15 THE REPORTER: I'm sorry. In the what?

16 MR. SOMACH: The Rincon and Mesilla  
17 valleys.

18 A. This is a figure I am borrowing from  
19 Dr. King. It's actually a little animation when you  
20 do it in PowerPoint that describes the hydrologic  
21 cycle of the project irrigation system. It's not  
22 detailed, and it doesn't include all of the phenomenon  
23 that occurred. So it's -- I'd say it's incomplete,  
24 but it -- it's a nice illustration of how water is  
25 distributed and where it goes.

1 was what when I reviewed your -- your deposition  
2 testimony then, you stated that all of your  
3 professional work has derived from the State of Texas.  
4 I think you indicated that was 30 years of  
5 professional work. Do I understand that correctly?

6 A. Derived from the State of Texas?

7 Q. I'm sorry. That's the fact that I'm old and  
8 I'm tired. State of New Mexico.

9 A. Almost all. I spent a couple years doing  
10 some consulting for state engineer's office.

11 Q. And since you left the state engineer's  
12 office, you're doing consulting now; is that correct?

13 A. That's right.

14 Q. And as I understand from your last  
15 deposition, most of that is with the State of New  
16 Mexico; is that correct?

17 A. Yeah. It's all with the State of New Mexico.

18 Q. Okay. So that all the opinions you're  
19 expressing in your expert report, did you develop  
20 those while you were working for the State of New  
21 Mexico?

22 A. Many of them, I did.

23 Q. And the ones that you didn't develop while  
24 working for the State of New Mexico, who were you  
25 working for?

1       A.    I guess you're including since I've been  
2   retired and I was a consultant.  Yes, yes, they've all  
3   been developed while I was working for the State of  
4   New Mexico one way or another, yes.

5       **Q.    You were talking about, in your first**  
6   **deposition, about the fact that salts accumulated the**  
7   **further down you go in the Rio Grande basin, the lower**  
8   **Rio Grande basin; is that correct?**

9       A.    Yes.

10      **Q.    Okay.  Today, you also said as well as in**  
11   **your prior deposition that the lower Rio Grande**  
12   **aquifer system is a mined aquifer.  Did you say that?**

13      A.    Yes.

14      **Q.    Okay.  Describe a mined aquifer for me.**

15      A.    A mined aquifer is one that on a monthly year  
16   basis, withdrawals are greater than recharge and so  
17   groundwater levels are dropping through time.

18      **Q.    And then a mined groundwater basin, is there**  
19   **a limit to how far those groundwater basins can drop?**

20      A.    Yeah.  And it depends on the aquifer.  I  
21   mean, there are some aquifers -- very thin aquifers  
22   where people are worried about using up all the water  
23   in the aquifer.  Those exist.

24      **Q.    So are you using the -- you know, the way I**  
25   **had it described before is obviously there's what you**

1 just described. That's a -- that's a physical limit.  
2 There just is no more water left. Does your  
3 definition of mined aquifer, including -- include an  
4 economic factor?

5 A. Well, the definition of mining does not, but,  
6 yeah, the -- what -- what stops groundwater use in  
7 such a basin may be economic as opposed to physical  
8 limit or it might be water quality issues.

9 Q. Who is it that decides to allow or not to  
10 allow a groundwater basin in New Mexico to be mined?

11 A. The state has regulatory authority, and in  
12 some basins, the state engineer promulgates rules and  
13 regulations to control the mining of an aquifer, and I  
14 don't know that the state engineers ever tried to make  
15 a decision about whether a basin should be mined or  
16 not. It's the water right owners who have the rights  
17 to use the water. The state engineer has some  
18 regulatory authority, but the state engineer is not  
19 the water god making decisions of -- decisions that  
20 aren't necessary or aren't, you know, part of his  
21 powers.

22 Q. So if the -- the water right holders -- the  
23 groundwater right holders in the lower Rio Grande and  
24 New Mexico decided that they were going to -- to mine  
25 the groundwater basin, absent some affirmative action

1 by the state engineer, they could do that?

2 A. State -- water right owners can use the water  
3 that they have a right to. There's also opportunity  
4 for water right owners to take action against each  
5 other if they're interfering with their -- each  
6 other's water rights. The -- what you're talking  
7 about seems more like a -- a public policy, and as  
8 time goes on, it seems like the state starts  
9 regulating resources more with an eye for public  
10 policy. It started with the Roswell Basin where the  
11 water right owners decided they were using up --  
12 endangering their water resource, and the state  
13 engineer declared the basin and the management started  
14 taking place to prevent damage to the resource. That  
15 happens in other parts of the state, often through  
16 settlement agreements involving the adjudication  
17 court. Managing to protect the resource is a  
18 difficult matter involving lots of stakeholders. The  
19 State doesn't have unitary authority.

20 Q. Do you know of any actions that the Office of  
21 State Engineer or, quite frankly, anyone else in the  
22 State of New Mexico has taken to manage the mining of  
23 the groundwater basin in the lower Rio Grande and New  
24 Mexico?

25 A. Well, the management steps New Mexico has



1 taken in the way of declaring a groundwater basin and  
2 then declaring a water master district and then  
3 metering groundwater pumping, adjudicating irrigation  
4 water rights, those are all steps in water management.  
5 I'd say that in addition, the state is undertaking a  
6 pilot program involving reducing depletions in the  
7 lower Rio Grande, which would be aimed at addressing  
8 the mining issue.

9 Q. So those are the steps that -- excuse me --  
10 the State of New Mexico has taken to address  
11 groundwater mining in the lower Rio Grande and New  
12 Mexico, the ones you articulated?

13 A. Those -- those are the ones I can come up  
14 with at the moment and the --

15 Q. Do you know -- go ahead. I keep interrupting  
16 you.

17 A. No, it's -- that's what I've got so far on  
18 that -- on that question.

19 Q. Okay. Do you know how many groundwater wells  
20 have been curtailed in terms of pumping by the State  
21 of New Mexico in the Lower Rio Grande?

22 A. The water master and the administrative legal  
23 unit of the state engineer's office take action  
24 against people who are diverting water without permit  
25 or in contradiction to their permit or illegally, and

1 I don't know the details of all of those cases so I  
2 can't.

3 Q. Well, let's exclude illegal diversions or  
4 diversions in excess of permit quantities. Do you  
5 know whether or not, aside from those actions, the  
6 state engineer's office has taken any action to  
7 curtail the groundwater pumping to address the mining  
8 situation we've described in the lower Rio Grande in  
9 New Mexico?

10 A. The pilot program I described is an effort to  
11 curtail some groundwater use in the interests of  
12 attacking the mining problem; otherwise, there has not  
13 been curtailment. Curtailment outside -- curtailment  
14 of lawful legitimate use of a permitted groundwater  
15 right is not something the state engineer has the  
16 power to do outside of priority -- some sort of  
17 priority call.

18 Q. In your opinion, is the mining of the  
19 groundwater basin caused by illegal diversions or  
20 diversions in excess of permit amounts? Is that  
21 what's causing that?

22 A. No.

23 Q. It's -- it's the legal pumping of groundwater  
24 that's causing the problem; is that correct?

25 A. Legal groundwater pumping combined with a

1 reduction in New Mexico's share of the Rio Grande  
2 project supply.

3 Q. Well, the reduction in Rio Grande project  
4 supply, just to put it in context, you're saying  
5 that's a cause because it causes more groundwater  
6 pumping; is that correct?

7 A. It causes more groundwater pumping and  
8 reduces the amount of aquifer recharge.

9 Q. What's a pilot program? How does a pilot  
10 program distinguish itself from an actual or a  
11 grown-up program?

12 A. Pilot program is a test program.

13 Q. Okay. So when you're talking about a pilot  
14 program, it's just a test. What is it testing?

15 A. It is a test of how depletion reduction  
16 program involving irrigated agriculture could be  
17 accomplished within the New Mexico state law and the  
18 operations of the Rio Grande -- or the operations of  
19 EBID and the other constraints that exist.

20 Q. And what's the -- the magnitude? What's the  
21 relative magnitude of -- of the test program? Is it 5  
22 percent of the wells in the Lower Rio Grande in New  
23 Mexico? Is it more? Is it less?

24 A. It's based on acreage, not on wells, and I  
25 don't know what the number will be.

1           Q.    So it hasn't been -- it hasn't -- it's in  
2 process, the -- the pilot program hasn't really been  
3 implemented then; is that correct?

4           A.    That's correct.

5           Q.    Okay.  When was New Mexico, to your  
6 knowledge, first aware that the groundwater basin in  
7 the lower Rio Grande was being mined?

8           A.    I would say it would be around 2010.

9           Q.    2010.  What occurred in 2010 to make New  
10 Mexico aware of the fact that it was being mined?

11          A.    The awareness of the -- the groundwater being  
12 mined came out of observations of the groundwater  
13 levels, and historically, groundwater levels in the  
14 Lower Rio Grande have dropped during times of drought  
15 or low project supply and then recovered thereafter.  
16 This happened in the '50s and in low supply periods in  
17 the '60s and '70s.  It also occurred in 2000.  
18 Groundwater levels dropped during the low supply years  
19 of 2003/2004.  What happened next is the -- in 2006,  
20 D3 allocation started, and EBID allocation of surface  
21 water was reduced, and in the years around in 2006,  
22 2007, 2008, 2009, the project -- I guess it was really  
23 2007, '8, and '9, the project had enough water for a  
24 full supply in those years, but EBID's allocation  
25 remained low, and -- but the -- so despite the fact

1 that the project had full supply, EBID did not, and  
2 groundwater levels did not recover, and that was the  
3 indication I'd say that we've gone into a regime of  
4 mining because we expect groundwater levels to decline  
5 in years where we've got a low ground -- low -- low  
6 project supply, but we expect them to come back up  
7 when the project -- thereafter when the project has a  
8 full supply again, and that did not happen in the  
9 years 2007, '8, '9, '10, when the project had enough  
10 water -- enough usable water for a full supply.

11 **Q. So roughly the State became aware of mining**  
12 **about ten years ago; is that correct?**

13 A. Yeah.

14 **Q. Do you know whether or not there have been**  
15 **any priority calls in the Lower Rio Grande?**

16 A. Not that I'm aware of.

17 **Q. I think in your first deposition, you**  
18 **indicated that when New Mexico administered water**  
19 **rights, it does so to protect seniors. Is that -- do**  
20 **I recall that? Is that a correct statement?**

21 A. That sounds generally -- that's generally  
22 right. There's different kinds of administration  
23 and -- and they would protect or deal with the seniors  
24 in different ways, but in general, the senior right is  
25 the better right in New Mexico.

1     **similar in terms of what they show?**

2           A.     They show that the use over this time period  
3     anyway is -- it fluctuated, but it was not a -- it did  
4     not show a trend of increased water use with time.

5           **Q.     If there --**

6           A.     With time.

7           **Q.     Okay.   If there was an increased depletion or**  
8     **increased consumption, where was the extra water**  
9     **coming from that's being consumed?  Is it reducing**  
10    **return flows?  Is it -- where does it come from?**  
11    **Something's got to supply the additional consumption,**  
12    **I assume?**

13                   **MR. WECHSLER:**  Object to form.

14          A.     So if we're going into a hypothetical mode  
15     question, I'd rather not since the more recent data is  
16     different than -- more recent results are different  
17     than this, I'd rather not.  So hypothetically, if you  
18     have an increase in agricultural consumption with time  
19     in -- within the Rio Grande project, it meant the  
20     water could come from a number of places.  There could  
21     be increased releases from reservoir storage.  There  
22     could be a reduction in return flows as you suggested.  
23     There could be mining of the groundwater system.

24          **Q.     (BY MR. SOMACH)  Okay.  Next slide.  And the**  
25    **Bates number on this is New Mexico 00096265.  What is**

1     **this showing you?**

2           A.     This shows the same data as the previous  
3     slide except I've added on the top an estimate of the  
4     consumptive use of groundwater by lands that are not  
5     served by EBID, but they are irrigated by groundwater  
6     only.

7           Q.     And what is the relevance of -- of this  
8     particular chart? Why did you -- you put this in  
9     there?

10          A.     It's the same purpose as the last chart  
11     except it's more complete since it includes all the  
12     irrigated acreage in the Lower Rio Grande.

13          Q.     So depletion comes not just from EBID lands  
14     but from lands outside EBID; is that -- is that  
15     correct?

16          A.     Right. Lands not served by EBID.

17          Q.     Okay. And then the next slide. That one is  
18     talking about municipal and industrial water use; is  
19     that correct?

20          A.     Yeah. This is the estimated depletion  
21     associated with municipal and industrial water use.

22          Q.     And those have increased from -- you start  
23     this at 1953, a little under 5,000 acre-feet a year to  
24     in excess of, well, maybe about 22,000 acre-feet per  
25     year in 2001; is that correct?

1           A.     Yeah.

2           Q.     Next -- the next slide. Okay. You -- this  
3 slide is entitled, "The facts we must deal with."  
4 "We" is the State of New Mexico at large; is that  
5 correct?

6           A.     That's right.

7           Q.     Well, the first fact, I assume it's a fact  
8 and that we're -- we're not living in Washington DC or  
9 somewhere, the fact means it's true, right? Is that  
10 correct?

11          A.     Yeah.

12          Q.     Okay. I just -- I'm just -- so the first  
13 fact is, "Groundwater and surface water behave as a  
14 single resource." Is that correct?

15          A.     Yes. And by which I meant I was attempting  
16 to get across the concept that groundwater and surface  
17 water are connected, and you cannot pump groundwater  
18 without impact to surface water, which you may be  
19 surprised, but there are many people who do not  
20 believe this, and when I'm giving presentations in the  
21 wild, I have to emphasize this.

22          Q.     I'm sure John Utton won't feel slighted by  
23 being in the wild somewhere. This was to the Lower  
24 Rio Grande Water Users Group, wasn't it?

25          A.     Yeah. And that's true that they are more



1 sophisticated on these issues than --

2 Q. Okay. I'm just joking. I know you didn't  
3 mean anything. Let's go to --

4 A. No offense.

5 Q. Can we go to the next slide?

6 A. Oh, yeah.

7 Q. Okay. Again, "The facts we must deal with.  
8 Groundwater pumping has been increasing in the Lower  
9 Rio Grande." Is that correct?

10 A. Yes.

11 Q. And notwithstanding your qualification on  
12 some of those earlier exhibits, the prior data still  
13 shows groundwater pumping is increasing; isn't that  
14 true?

15 A. Well, groundwater pumping looks pretty stable  
16 to me over the past 20 years or so.

17 Q. Since -- give me 20 years or so, what does  
18 that take us back to, 2000?

19 A. Yeah. I mean, of course, groundwater pumping  
20 for irrigation varies from year to year depending on  
21 surface water supply. But --

22 Q. So -- go ahead.

23 A. So I guess I'm getting back to the analysis I  
24 did groundwater pumping plus surface water application  
25 for irrigation, that total has not been changing, and

1 then irrigation pumping for municipal and industrial  
2 use, again, has been pretty -- it's -- it's pretty  
3 flat. It had not been increasing since about the year  
4 2000.

5 **Q. Okay. So this is not a fact? This isn't**  
6 **true, this first bullet?**

7 A. Well, it depends what time frame you're  
8 talking about. I'm giving this talk in 2005. Things  
9 were -- irrigation -- M&I pumping had been increasing  
10 over the couple of decades before that, and irrigation  
11 well pumping in and of itself had certainly increased  
12 from the time of full supply in the '80s and '90s  
13 into -- increased from that when we got into the low  
14 supply years of 2003 and 2004.

15 **Q. Okay. The next bullet, you have ranges of**  
16 **numbers. Are those ranges that says, "Groundwater**  
17 **pumping for irrigation use alone may be as high as,"**  
18 **and it comes up with 50,000 to 200,000 acre feet a**  
19 **year in full project supply years and 200,000 to**  
20 **300,000, and you've got equivocation there with a**  
21 **question mark, acre feet per year in low project**  
22 **supply years. Are those still facts that you believe**  
23 **to be true?**

24 A. Those numbers were estimated. This is before  
25 we had the metering program implemented, and -- but

1 they're still pretty good.

2 Q. Okay. So these are -- these are still good  
3 numbers. Go to the next slide. I think you've  
4 testified to that a whole bunch of times. Is that  
5 groundwater pumping dries up drains. That's --

6 A. Yes.

7 Q. Okay. Go to the next one. "Drain flows are  
8 part of the water supply of the Rio Grande project."  
9 I think you've said that already; is that accurate?

10 A. Yes.

11 Q. Okay. Now, the first bullet point  
12 says, "Historically, drain flows have added about 20  
13 percent to project diversions." Is that an  
14 accurate -- you still believe that's accurate?

15 A. Yeah.

16 Q. So -- and I realize there are other things  
17 that you talked about adding to the project supply,  
18 but let's just focus on return flows. If you were to  
19 look at the amount of water that's -- in any given  
20 year that's released from the reservoir and allocated  
21 and assume that's 100 percent, would you add 20  
22 percent to that to give yourself essentially 120  
23 percent of supply? Does that make any sense?

24 A. Almost.

25 Q. But did --

1           A.     Delete the words and allocated.

2           Q.     That's fine. Take it out. All I'm trying to  
3 say is that 20 percent isn't new water, it's reused  
4 water, it's water that needs to be used twice in order  
5 to meet project purposes; is that correct?

6           A.     Right. It's water that is recycled and so  
7 for a release of a hundred, you can deliver 120.

8           Q.     Okay. Next bullet says, "When the drains are  
9 dry," that is when you don't get the 20 percent, I  
10 assume, "the Rio Grande project water supply is  
11 reduced and project water cannot be delivered  
12 efficiently." That's accurate, isn't it? You've  
13 testified to that today?

14          A.     Yes.

15          Q.     Okay. And, I guess, at that point in time,  
16 you thought that groundwater pumping was a problem; is  
17 that -- is that accurate?

18          A.     Well, it was our belief that it could be a  
19 problem, and we needed to get the tools in place to  
20 deal with it.

21          Q.     That's how you articulated it earlier, and so  
22 what I'd like to do is -- is focus on the word could  
23 be a problem. Why do you equivocate there? What is  
24 causing you to stop from saying, yeah, in 2005, we  
25 thought it was a problem?

1           A.     In 2005, we thought it could be a problem,  
2     that this could be a problem we would have to face.

3           **Q.     Is the purpose of the PowerPoint presentation**  
4     **to convince groundwater pumpers that they need to be**  
5     **regulated?**

6           A.     Yes.

7           **Q.     Okay.   So you want to regulate them because**  
8     **of a could be a problem or because there is a problem?**

9           A.     We wanted to regulate them because there  
10    could be a problem, and perhaps in trying to convince  
11    them, we tried to be as persuasive as we can.  We may  
12    imply more than -- I mean, one of the potential  
13    problems is that Texas could sue us.  That was not a  
14    problem at the moment.  Texas was not suing us at the  
15    moment, but it was -- it could be a problem, and  
16    indeed, it has come to pass.

17          **Q.     Qualitatively, that's quite a different**  
18    **question, isn't it?  If you go back, you said, "When**  
19    **the drains are dry, the Rio Grande project water**  
20    **supply is reduced, and project water cannot be**  
21    **delivered efficiently."  Then you proceed in your**  
22    **PowerPoint to say the drains are dry, groundwater**  
23    **pumping has increased.  Is that a could be a problem**  
24    **again or is that the problem, and you're addressing**  
25    **it?**

1           A.     Okay.  I say the drains are dry?

2           Q.     Yes.  If you go back -- well, here, go -- go  
3     to the one you're on.  You can just start there.  
4     Drain flows are part of the project supply.  You say  
5     when the drains are dry.  Do you see that?

6           A.     Yeah.

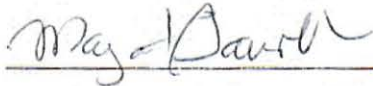
7           Q.     If that occurs, is that a problem?

8           A.     Well -- for many years, the project operated,  
9     and farmers in both Texas and New Mexico pumped  
10    groundwater, especially in times of shortage, and  
11    dried up the drains after the low supply years and  
12    the -- the drains recovered and groundwater levels  
13    recovered.  Is that a problem?  It seemed like the  
14    project was working pretty effectively back then, and  
15    we -- pumping of groundwater is what kept the project  
16    going during times of low supply.  So not all  
17    groundwater pumping is necessarily a problem.  The  
18    advantages outweigh the detriments, and whether this  
19    is a problem to the extent that action needs to be  
20    taken in curtailing water rights, we certainly weren't  
21    at that stage, but we saw that as a possibility, and  
22    we wanted to get the tools in place that would allow  
23    us to do it if necessary.

24          Q.     Okay.  So as I'm understanding it, there was  
25    no problem in 2005.  You were worried about -- and

## SIGNATURE OF WITNESS

I, PEGGY BARROLL, solemnly swear or affirm under the pains and penalties of perjury that the foregoing pages contain a true and correct transcript of the testimony given by me at the time and place stated with the corrections, if any, and the reasons therefor noted on the foregoing correction page(s).



PEGGY BARROLL

Job No. 63574



## WITNESS CORRECTIONS AND SIGNATURE

Please indicate changes on this sheet of paper,  
giving the change, page number, line number and reason  
for the change. Please sign each page of changes.

PAGE/LINE	CORRECTION	REASON FOR CHANGE
16/2	change "under" to "other"	Transcription error
17/23	change "we chose" to "there is"	" "
18/1	change "in" to "and"	" "
29/24	change "1938" to "1978"	" "
33/20-21	change "I never read" to "Or I read"	" "
49/6	omit "sort of"	" "
56/25	add "and" in between "diversion" and "use"	" "
60/4	change "gets" to "gives"	" "
63/18	change "credit" to "current"	" "
79/7	add "the Tornillo heading at" after "Historically"	clarification
79/16	add a period between "Grande" and "After"	clarification
98/19	change "now" to "how"	Transcription error
109/15	change "monthly" to "many"	" "
123/22	change "70" to "78", both places.	" "
128/1	change "in size" to "incised"	" "
133/17	should read "using the Modified Blaney-Criddle method"	" "
138/18	change "200,000" to "100,000"	" "
148/9	change "a posed" to "opposed"	" "

Mary T. Barroll

PEGGY BARROLL



STATE OF TEXAS )  
 )  
 )  
 Plaintiff, )  
 )  
 ) Original Action Case  
 VS. )  
 ) No. 220141  
 )  
 ) (Original 141)  
 )  
 STATE OF NEW MEXICO, )  
 )  
 and STATE OF COLORADO, )  
 )  
 )  
 )  
 Defendants. )

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 above and foregoing answers of the witness, PEGGY BARROLL, to the interrogatories as indicated were made before me by the said witness after being first remotely duly sworn to testify the truth, and same were reduced to typewriting under my direction; that the above and foregoing deposition as set forth in typewriting is a full, true, and correct transcript of the proceedings had at the time of taking of said deposition.

I further certify that I am not, in any capacity, a regular employee of the party in whose

behalf this deposition is taken, nor in the regular  
employ of this attorney; and I certify that I am not  
interested in the cause, nor of kin or counsel to  
either of the parties.

That the amount of time used by each party at  
the deposition is as follows:

MR. SOMACH - 04:43:05

MR. WECHSLER - 00:00:00

MR. LEININGER - 00:00:00

MR. WALLACE - 00:00:00

MS. O'BRIEN - 00:00:00

GIVEN UNDER MY HAND AND SEAL OF OFFICE,  
this, the 25th day of July, 2020.

*Heather L. Garza*

HEATHER L. GARZA, CSR, RPR, CRR

Certification No.: 8262

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IN THE SUPREME COURT OF THE UNITED STATES  
BEFORE THE OFFICE OF THE SPECIAL MASTER  
HON. MICHAEL J. MELLO

STATE OF TEXAS	)	
	)	
Plaintiff,	)	
	)	Original Action Case
VS.	)	No. 220141
	)	(Original 141)
STATE OF NEW MEXICO,	)	
and STATE OF COLORADO,	)	
	)	
Defendants.	)	

\*\*\*\*\*

REMOTE ORAL AND VIDEOTAPED DEPOSITION OF  
PEGGY BARROLL  
AUGUST 7, 2020  
VOLUME 2

\*\*\*\*\*

REMOTE ORAL AND VIDEOTAPED DEPOSITION of PEGGY BARROLL, produced as a witness at the instance of the Plaintiff State of Texas, and duly sworn, was taken in the above-styled and numbered cause on August 7, 2020, from 8:01 a.m. to 3:40 p.m., before Heather L. Garza, CSR, RPR, in and for the State of Texas, recorded by machine shorthand, at the offices of HEATHER L. GARZA, CSR, RPR, The Woodlands, Texas, pursuant to the Federal Rules of Civil Procedure and the provisions stated on the record or attached hereto; that the deposition shall be read and signed.

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17 VIDEOGRAPHER:

18 Mr. Christian Barrett  
19

20 ALSO PRESENT:

21 Al Blair  
22 Bert Cortez  
23 Ian Ferguson  
24 Shelly Dalrymple  
25 Susan Barela  
Estevan Lopez

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23	Water Supply Vulnerabilities Final	
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24	and Natural Resources dated	
	August 31, 2015	
25		

1 THE VIDEOGRAPHER: The time is 8:01  
2 a.m., and we are on the record.

3 PEGGY BARROLL,  
4 having been first duly sworn, testified as follows:

5 E X A M I N A T I O N

6 BY MR. SOMACH:

7 Q. Dr. Barroll, we've got to quit meeting like  
8 this. This is -- you know what I was thinking is we  
9 should do some kind of an agreement, you stop writing  
10 reports, and I will stop deposing you.

11 A. Okay.

12 Q. I don't think I've ever deposed a witness  
13 over such a long period of time before. So that's a  
14 deal, right?

15 A. Yeah. That's a deal.

16 Q. You'll stop writing reports?

17 MR. SOMACH: Let's make some  
18 appearances. This is Stuart Somach on behalf of the  
19 State of Texas. I notice that Robert Hoffman from our  
20 office is also on the phone. Jeff, appearances for  
21 New Mexico?

22 MR. WECHSLER: Jeff Wechsler on behalf  
23 of the State of New Mexico, and we also have Shelly  
24 Dalrymple, Susan Barela, and Estevan Lopez.

25 MR. SOMACH: Lee, for the United States?

1 based upon the D2 curve; is that correct?

2 A. That's -- that's the way that Dr. Blair  
3 describes it, yeah.

4 Q. Well, how would you describe it? Do you --  
5 do you believe that it's -- it's something else, other  
6 than that?

7 A. I believe that may have been the intent, but  
8 that's not how it worked out, that EP No. 1 is getting  
9 allocated or getting the ability to use more water  
10 than they did under -- in the D2 period, because of --  
11 largely because of changes in accounting. So in the  
12 end, they're being -- the amount of water that things  
13 are carved out for EP No. 1 is even larger than the D2  
14 share.

15 Q. If you use D2 as the basis of what EBID and  
16 EP No. 1 should get without a D3 and adjusted the  
17 respective allocation to EBID to -- to obtain what the  
18 D2 curve would provide, would EP No. 1 be shorted --  
19 would they -- would they fall below the D2?

20 A. I'm not sure I understand the question.

21 Q. Yeah. What happens if you eliminated D3?  
22 Okay?

23 A. If you just use the straight D1/D2 curves --

24 Q. Yeah.

25 A. -- as described in the water supply



1 allocation before its procedures to allocate water,  
2 what would happen?

3 **Q. Yes.**

4 A. I would think what would happen is the  
5 project would be allocating more water than they  
6 might -- than they could deliver, which would be  
7 potentially be a problem.

8 **Q. Could you explain that? I don't -- I**  
9 **actually don't understand that answer.**

10 A. So the D2 curve tells -- calculates how much  
11 water supply, project supply, there's going to be for  
12 a given release from storage, and then that water  
13 split up between Mexico and the two districts. That  
14 number you get off the D2 curve is higher than the  
15 charged diversions that can be delivered from that  
16 same release of water and so if you use the D2 curve  
17 the way they had been to calculate the total amount of  
18 project supply, that's more water than would be  
19 delivered in the way of charged diversions or  
20 allocation charges. And in parts, that's because  
21 there's been a change in accounting so not all the  
22 water that used to count as part of the D2 curve is no  
23 longer being charged. Some of that water is no longer  
24 being charged as project diversions, and some of it is  
25 a result of physical changes, less drain flow, more

1 river seepage throughout the project. But in either  
2 case, it -- the Bureau used the D2 curve, used D1/D2  
3 as it had been previously documented, I believe they  
4 would probably be allocating more water than they  
5 could deliver in the way of charged diversions, and  
6 operationally, that could cause problems for them.

7 Q. Is the -- is the reduced drain flow and  
8 seepage that you mention, that -- that's a result of  
9 groundwater pumping, isn't it?

10 A. Yes.

11 Q. Are -- is the purpose of this chapter to say  
12 you ought to be -- you ought to drop the D3 out of the  
13 equation and just go with D1/D2?

14 A. I'm not really making a recommendation in  
15 this chapter. I'm just trying to quantify the  
16 effective -- the switch to D3 and so I can compare  
17 that to the impact of New Mexico pumping.

18 Q. With respect to your discussion of carryover,  
19 did you assume that if water was not carried over, it  
20 would be used in the year it was allocated or did you  
21 assume it would be carried over, then split the next  
22 year 57/43?

23 A. I assume that any water not called for or any  
24 allocation not used, water associated -- the water in  
25 storage associated with that unused allocation would

1 stay in storage and be in the pool available for  
2 allocation in 57/43 the next year.

3 Q. Okay.

4 A. That's what the model assumes. I -- I mean,  
5 when it's doing Run 11.

6 Q. That's the rule; is that right?

7 A. Yeah.

8 Q. Okay. On that same page, you have a  
9 paragraph that says, "A large magnitude EBID impacts,"  
10 and so forth, then you have two subparagraphs, 1 and  
11 2. With respect to two, you say, "The hydrological --  
12 hydrologic effects of the increase in New Mexico  
13 groundwater pumping and decrease in aquifer recharge  
14 caused by the 2008 operating agreement." I said the  
15 words right, but I read it in an awkward way. Then  
16 you say, "These aquifer impacts reduce project  
17 performance, reduce the diversion ratio, reduce  
18 project supply, and thus further reduce EBID  
19 allocation under the D3 allocation method, i.e. the  
20 vicious cycle," in parens. Did I read the words  
21 right, even if I emphasized the word?

22 A. Yes, I think so.

23 Q. Okay. Are you saying there that groundwater  
24 pumping in and of itself is a problem, and the 2008  
25 operating agreement by reducing surface water to EBID

1     **exacerbates the problem?**

2           A.     So I -- I interpret that as asking if  
3     groundwater pumping in New Mexico was a problem before  
4     the operating agreement, and in my opinion, it could  
5     have been a problem before the operating agreement. I  
6     certainly was concerned about the level of groundwater  
7     pumping before the operating agreement, but up until  
8     that time, there had been pumping during low supply  
9     years that after the low supply period ended,  
10    groundwater levels had recovered, and so previously,  
11    groundwater pumping had worked to tie EBID and EP No.  
12    1, for that matter, over during low supply periods and  
13    that the aquifer in New Mexico, at least, had  
14    recovered following that and so when -- before the  
15    operating agreement, when I was looking at the problem  
16    back when we were proposing those AWRM rules, we had  
17    just had a couple of really low supply years in which  
18    there have been a lot of New Mexico pumping and I  
19    think I was concerned that we were getting into  
20    trouble with the amount of pumping in New Mexico, but  
21    I'm not sure that it would have been a problem without  
22    the operating agreement going into effect.

23           **Q.     Well, let me ask you this:   If not expressed,**  
24    **certainly implicit in that statement that we've been**  
25    **talking about, is the recognition that pumping from**

1 the groundwater aquifer there has an impact on project  
2 operations? Isn't -- isn't that correct?

3 A. It does have an impact on project operations,  
4 yes.

5 Q. Okay. The next paragraph that starts  
6 with, "Comparison," do you see that?

7 A. Yeah.

8 Q. You say, "Comparison of the results described  
9 above shows that the reduction on its -- reduction in  
10 EBID allocation diversion caused by the 2008 operating  
11 agreement, parens, D3 plus carryover, end parens, is  
12 much larger than the effect of New Mexico groundwater  
13 pumping on EPCWID in the years leading up to the  
14 adoption of D3 plus carryover." First of all,  
15 expressed, I think, in there is a -- a statement that  
16 New Mexico groundwater pumping has a adverse effect on  
17 EPCWID. Is that -- I mean, I think that's what that  
18 says. Is that correct?

19 A. Well, I believe that Run 3 calculates the  
20 impact of all New Mexico pumping, you know, comparison  
21 of a base run, and Run 3 calculates the impact of all  
22 New Mexico pumping on the project on EP No. 1's  
23 allocation and the delivery. And indeed in some years  
24 there is a reduction in EP No. 1's allocation and  
25 delivery that can be attributed to groundwater pumping

1 in New Mexico.

2 Q. So in that statement, is -- is part of the  
3 concern that EBID is bearing the burden of non-EBID  
4 groundwater pumping?

5 A. Well, I don't know that it comes to play in  
6 this sentence. I mean, what I'm saying is that if you  
7 actually calculate the impact of New Mexico pumping on  
8 EP No. 1, it's significantly smaller than the impact  
9 of the operating agreement on EBID. So EBID is  
10 overpaying, and the overpayments related to a lot of  
11 different things, the changes in project allocation --  
12 I mean, project accounting, and it's also related,  
13 actually, to the vicious cycle, which means that once  
14 it gets going, it just -- positive feedback loop  
15 occurs, and it gets worse and worse, so EBID ends up  
16 paying more and more because of what the -- the  
17 positive feedback loop.

18 Q. If you take a look at, again, the same page  
19 beginning where it says -- the very bottom of that  
20 page and carrying over to Roman Numeral 7, "In sum,  
21 the analyses I have presented demonstrate that the  
22 actual impact of New Mexico groundwater pumping on  
23 EPCWID is far less" -- which is bolded -- "than the  
24 amount of project supply that has been reallocated  
25 away from EBID under the 2008 operating agreement, D3

1 plus carryover." Did I read that correctly?

2 A. Yes.

3 Q. That's the fundamental conclusion you're  
4 reaching; is that correct?

5 A. That's correct.

6 Q. So, again, it recognizes that there is an  
7 impact on EPCWID from New Mexico groundwater pumping,  
8 but you're saying that the operating agreements  
9 adverse impact on EBID is much greater than the impact  
10 of groundwater pumping in New Mexico that it has on  
11 EPCWID; is that -- is that what you're saying there?

12 A. Yeah. That's what I'm saying there. And, in  
13 fact, when I think back on what the New -- what the  
14 U.S. experts were saying, I mean, Dr. King and  
15 Dr. Ferguson were talking about the operating  
16 agreement being a mechanism to offset New Mexico's  
17 additional pumping in excess of what occurred during  
18 the D1/D2 period or additional New Mexico depletions  
19 beyond what was occurring during the D1/D2 period, and  
20 the calculation I made is even more conservative than  
21 that. It takes into account the effect of all New  
22 Mexico pumping.

23 Q. If I go to what is now Page 1 of your report,  
24 this is -- this is where you get into more detail, but  
25 I want to make sure that the introduction doesn't

1 introduce any -- any new purposes or concepts than  
2 what we're in, in your original summary. It's just  
3 amplifying on what's in the summary; is that correct?

4 A. That was my intent.

5 Q. So you lay out five -- five things that  
6 you're looking at, which -- and you lay out five  
7 things in the summary opinion conclusion part of your  
8 report. Are they the same things? Is that --

9 A. I believe they're the same things. The  
10 lawyers insist it be identical.

11 Q. Okay. That's good -- good thing.

12 A. My editors insisted they be identical.

13 THE REPORTER: I'm sorry. Please repeat  
14 what you just said.

15 THE WITNESS: My editors insisted they  
16 be identical.

17 Q. (BY MR. SOMACH) The -- if you look to about  
18 mid page on Page 1, you say, "The rebuttal report  
19 filed July 15, 2020, by Gregory K. Sullivan." Do you  
20 see that there?

21 A. Yes.

22 Q. Then if you look at the last sentence, it  
23 says, "The ILRGM simulates the groundwater systems of  
24 the Rincon, Mesilla, and Hueco Bolson/El Paso Valley,  
25 and also actively simulated -- simulates the



1 allocation and distribution of water by the Rio Grande  
2 Project." Do you see that?

3 A. Yes.

4 Q. I read that right, right?

5 A. Uh-huh.

6 Q. There are two things in that paragraph. I  
7 want to focus a bit on the -- the first clause just to  
8 understand it. You say, "The ILRGM simulates the  
9 groundwater systems of the Rincon, Mesilla, Hueco  
10 Bolson, El Paso Valley." I thought it was the MODFLOW  
11 models that simulate the groundwater basins, and they  
12 were fed into the ILRG. You know, perhaps you can  
13 correct me in terms of my understanding or at least  
14 explain, if the ILRG simulates the groundwater  
15 systems, what is the purpose of the two MODFLOW models  
16 that were also reported on in July?

17 A. Well, I -- we may be in a question of  
18 definition. I -- I take the ILRGM to be the  
19 accommodation of two MODFLOW models, a RiverWare model  
20 and whatever connective tissue is needed to get those  
21 models to talk to each other.

22 Q. Well, let's focus on some of the connective  
23 tissue you just talked about. The MODFLOW models  
24 themselves have a connective tissue aside from the  
25 RiverWare model in terms of the way the groundwater

## WITNESS CORRECTIONS AND SIGNATURE

Please indicate changes on this sheet of paper,  
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for the change. Please sign each page of changes.

PAGE/LINE      CORRECTION      REASON FOR CHANGE

176/20      <sup>change</sup> "charge"      <sup>to</sup> "charged"

181/7      "the advantage"      "is an advantage"

182/11      "so"      "between"

200/12-13      "things are"      "is"

201/22-23      change "is no longer being charged"      "is"

to "is being charged as Project Supply now"

202/2      change "it"      to "if"

204/11      "tic"      to "tide"

209/19      "accomodation"      to "combination"

218/22      change "in large supply years, it's minimized"

to "in low supply years, it's utilized"

228/22      change "start"      to "short"

231/21      change "effluent in"      to "effluent and"

246/21      "is when if it"      to "that"

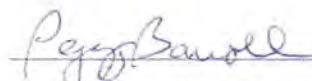
246/4      "little"      "poor"

268/2      omit "were"

PEGGY BARROLL, VOLUME II

## SIGNATURE OF WITNESS

I, PEGGY BARROLL, solemnly swear or affirm under the pains and penalties of perjury that the foregoing pages contain a true and correct transcript of the testimony given by me at the time and place stated with the corrections, if any, and the reasons therefor noted on the foregoing correction page(s).

 9/26/2020  
PEGGY BARROLL, VOLUME II

Job No. 65038

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IN THE SUPREME COURT OF THE UNITED STATES  
BEFORE THE OFFICE OF THE SPECIAL MASTER  
HON. MICHAEL J. MELLOY

STATE OF TEXAS	)	
	)	
Plaintiff,	)	
	)	Original Action Case
VS.	)	No. 220141
	)	(Original 141)
STATE OF NEW MEXICO,	)	
and STATE OF COLORADO,	)	
	)	
Defendants.	)	

THE STATE OF TEXAS :  
COUNTY OF HARRIS :

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 above and foregoing answers of the witness, PEGGY BARROLL, to the interrogatories as indicated were made before me by the said witness after being first remotely duly sworn to testify the truth, and same were reduced to typewriting under my direction; that the above and foregoing deposition as set forth in typewriting is a full, true, and correct transcript of the proceedings had at the time of taking of said deposition.

I further certify that I am not, in any capacity, a regular employee of the party in whose

1 behalf this deposition is taken, nor in the regular  
2 employ of this attorney; and I certify that I am not  
3 interested in the cause, nor of kin or counsel to  
4 either of the parties.

5  
6 That the amount of time used by each party at  
7 the deposition is as follows:

8 MR. SOMACH - 02:27:02

MR. WECHSLER - 00:00:00

9 MR. LEININGER - 01:39:53

MR. WALLACE - 00:00:00

10 MS. O'BRIEN - 00:00:00

MS. BARNCastle - 00:00:00

11  
12 GIVEN UNDER MY HAND AND SEAL OF OFFICE, on  
13 this, the 2nd day of September, 2020.

14 

15 HEATHER L. GARZA, CSR, RPR, CRR

16 Certification No.: 8262

17 Expiration Date: 04-30-22

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STATE OF NEW MEXICO,	)	
and STATE OF COLORADO,	)	
	)	
Defendants.	)	

\*\*\*\*\*

REMOTE ORAL AND VIDEOTAPED DEPOSITION OF  
PEGGY BARROLL  
OCTOBER 21, 2020

\*\*\*\*\*

REMOTE ORAL AND VIDEOTAPED DEPOSITION of PEGGY BARROLL, produced as a witness at the instance of the United States, and duly sworn, was taken in the above-styled and numbered cause on October 21, 2020, from 1:02 p.m. to 3:29 p.m, before Heather L. Garza, CSR, RPR, in and for the State of Texas, recorded by machine shorthand, at the offices of HEATHER L. GARZA, CSR, RPR, The Woodlands, Texas, pursuant to the Federal Rules of Civil Procedure and the provisions stated on the record or attached hereto; that the deposition shall be read and signed.

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1 ALSO PRESENT:

2 Arianne Singer

Estevan Lopez

3 Greg Ridgley

John D'Antonio

4 Erek Fuchs

Michelle Estrada-Lopez

5 Al Blair

Bert Cortez

6 Shelly Dalrymple

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1 THE VIDEOGRAPHER: The time is 1:02 p.m.  
2 We're on the record.

3 (The witness was sworn.)

4 MR. DUBOIS: Why don't we do  
5 appearances. For the United States, I am James  
6 Dubois. I am one of the attorneys for the United  
7 States, and Jennifer Najjar, Shelly Randel, and I  
8 think eventually Mr. Leininger -- yes, Lee Leininger  
9 also on for the United States, and I think that is --  
10 oh, and Bert Cortez and Ian Ferguson. That's it. So  
11 New Mexico?

12 MR. WECHSLER: Jeff Wechsler for the  
13 State of New Mexico. We also have Lisa Thompson,  
14 Susan Barela, Arianne Singer, Greg Ridgley, John  
15 D'Antonio, and Shelly Dalrymple.

16 MR. DUBOIS: For Texas?

17 MS. KLAHN: Sarah Klahn for the State of  
18 Texas, and I'm joined by Stuart Somach.

19 MR. DUBOIS: Colorado?

20 MR. HARTMAN: Preston Hartman for  
21 Colorado.

22 MR. DUBOIS: Let's go to the amici. Is  
23 anyone on for EB -- EPCWID? Renea?

24 MR. HICKS: Hold on. I'm here. I  
25 didn't know Maria wasn't on.

1                   **MR. DUBOIS:** I don't see her.

2                   **MR. HICKS:** Okay. She just skipped out  
3 on me then. I'm here.

4                   **MR. DUBOIS:** Is anybody else on?

5                   **MS. COLEMAN:** Judy Coleman is on for the  
6 United States.

7                   **MR. DUBOIS:** Thank you, Judy. Renea,  
8 also, Al Blair is on.

9                   For EBID?

10                  **MS. BARNCASTLE:** Yes. This is Samantha  
11 Barncastle for the Elephant Butte Irrigation District,  
12 and I'm joined by Dr. Erek Fuchs.

13                  **MR. DUBOIS:** Okay. Let me see who else.  
14 I'm just sort of scanning through and seeing who's on.  
15 Is NMSU on?

16                               (No response.)

17                  **MR. DUBOIS:** No. City of El Paso?

18                  **MR. CAROOM:** Doug Caroom for the City of  
19 El Paso.

20                  **MR. DUBOIS:** And are there any other  
21 representatives on for any of the other amici?

22                               (No response.)

23                  **MR. DUBOIS:** Okay. I don't see any.  
24  
25

1 PEGGY BARROLL,  
2 having been first duly sworn, testified as follows:

3 E X A M I N A T I O N

4 BY MR. DUBOIS:

5 Q. All right. Can you state your name for the  
6 record, please, Dr. Barroll?

7 A. Margaret Barroll.

8 Q. All right. Now, you've been deposed in this  
9 proceeding before once or twice or three times or  
10 possibly more so you know the basic ground rules, but  
11 I'll go over them anyway. You're under oath as if you  
12 were in a court of law. We will try not to talk over  
13 each other. Let me finish my questions, and I will  
14 try to let you -- to not interrupt your answers. If  
15 you don't understand one of my questions, please let  
16 me know, and I will try to rephrase it. Otherwise,  
17 I'll assume you understand the question. Your other  
18 communication devices such as e-mail and texts should  
19 be off, and I think that's about it.

20 You've been identified as a 30(b)(6) witness  
21 on behalf of New Mexico with respect to limited  
22 topics; is that right?

23 A. That's right.

24 Q. Okay.

25 MR. DUBOIS: Kayla, will you pull up the

1 Compact and the actual delivery of Compact water by  
2 the Project to Mexico to work as necessary with  
3 Reclamation to ensure that can occur and then Mexico  
4 also -- New Mexico is also responsible to act in good  
5 faith to resolve any issues raised by Compact parties  
6 as to New Mexico's activities below Elephant Butte,  
7 especially as to how they might affect the Rio Grande  
8 project.

9 **Q. What do you mean by cooperating with**  
10 **Reclamation to effectuate the delivery of Compact**  
11 **water to the project?**

12 A. Well, Reclamation --

13 **Q. By the project?**

14 A. Well, Reclamation and the project are how the  
15 Compact is effectuated below Elephant Butte. The  
16 Compact -- sorry. The project is the mechanism by  
17 which project water is delivered below Elephant Butte,  
18 and New Mexico is the state in which some of this is  
19 occurring, and New Mexico has the responsibility not  
20 to interfere with that or not to -- or to ensure that  
21 that can occur to work in --

22 **Q. And how -- I'm sorry. I didn't mean to cut**  
23 **you off.**

24 A. Yeah. To work in concert with Reclamation  
25 when it comes to whatever is necessary surface water

1 distribution of the project.

2 **Q. What do you mean by New Mexico has the**  
3 **responsibility not to interfere?**

4 A. I would say to not pass laws or -- I mean, to  
5 -- to ensure that New Mexico's laws and rules and  
6 regulations are consistent with the needs of the --  
7 the project's distribution of surface water. To work  
8 in good faith with the project, like, for example,  
9 when Reclamation EBID wanted to add a point of  
10 diversion in one of the wasteways, we ended up coming  
11 to an understanding with Bureau of Reclamation as to  
12 how that fit into their --

13 **Q. Does -- does New Mexico have any obligation**  
14 **to administer non-project surface rights to -- let me**  
15 **rephrase that one.**

16 **Does New Mexico have any obligation to**  
17 **administer water rights in the State of New Mexico to**  
18 **protect or administer the surface water supply of the**  
19 **Rio Grande project once water has been stored in**  
20 **Elephant Butte reservoir?**

21 **MR. WECHSLER:** Object to form.

22 A. Well, the surface water system has been fully  
23 appropriated in the Lower Rio Grande and has been  
24 since 1907 -- 1908 is my understanding. And so New  
25 Mexico cannot grant any additional surface water



1 rights, and New Mexico must enforce against illegal  
2 surface water diversions that would be adverse to the  
3 project.

4 Q. (BY MR. DUBOIS) What do you mean that the  
5 surface water system has been fully appropriated since  
6 1907 or 1908?

7 A. I believe that is when the U.S. filed a  
8 letter with the territorial engineer appropriating all  
9 the surface water of the Rio Grande.

10 Q. But -- but what does fully appropriated mean  
11 to you?

12 A. To me, it means that we cannot issue or allow  
13 any additional appropriations of surface water and --  
14 yeah, I think that's what it means.

15 Q. Okay. So all -- all of the surface water in  
16 the Rio Grande has been allocated by appropriation as  
17 of that date? Would that be another way of saying  
18 that?

19 A. Yes. That's my understanding.

20 Q. Okay. So does New Mexico have any obligation  
21 to assure that the usable water released from storage  
22 in Elephant Butte reservoir is delivered to the Rio  
23 Grande Project below Elephant Butte reservoir?

24 MR. WECHSLER: Object to form.

25 A. Well, as soon as the water -- as soon as

1 usable water is released from storage, it is, in fact,  
2 usable water or project supply.

3 Q. (BY MR. DUBOIS) So does the State of New  
4 Mexico have any obligation to assure that the usable  
5 water that's released from storage is delivered to the  
6 project below Elephant Butte?

7 A. I believe that if the Compacting parties or  
8 project beneficiaries believe there's a problem in the  
9 delivery of project water caused in New Mexico, that  
10 New Mexico has the obligation to address that, either  
11 as a Compact issue or as a water rights administration  
12 issue.

13 Q. Okay. Does New Mexico take any steps to  
14 administer water rights in the Rio Grande basin below  
15 Elephant Butte to assure that the project water supply  
16 is not depleted or reduced by non-project water users  
17 in New Mexico?

18 A. New Mexico takes many steps to administer  
19 water below Caballo, below Elephant Butte, in order to  
20 protect the water users and protect the project, such  
21 as enforcing against illegal diversions, metering  
22 groundwater, enforcing against over diversions, our  
23 application process by which no additional  
24 appropriations can be approved without offsets. There  
25 are many steps New Mexico takes for administering

1 water below Elephant Butte.

2 Q. Okay.

3 A. New Mexico does not have an obligation to  
4 ensure that no depletions occur.

5 Q. You said that New Mexico has a -- an  
6 obligation to prevent over diversion. What are you  
7 defining as over diversion?

8 MR. WECHSLER: Object to the form.

9 A. Over diversion would be an excess of the  
10 limit of a water right.

11 Q. (BY MR. DUBOIS) And that limit is set by a  
12 permit or license? I don't recall exactly what New  
13 Mexico calls them.

14 A. Yeah. It depends. We have both permits; we  
15 have licenses. But, for example, in the case of  
16 irrigation groundwater use, those are set by the 101  
17 rule -- sorry -- by the -- the judge's order, the  
18 final statement of the judge in the Stream System 101  
19 case at the New Mexico adjudication.

20 Q. And so --

21 A. And that's --

22 Q. So that would be -- as I understand it, over  
23 diversion under Stream System 101 would be if the  
24 diversions exceed either four-and-a-half or  
25 five-and-a-half acre-feet per acre?

1           A.     That's correct.

2           Q.     Is that correct? All right. And so you -- I  
3 was just -- I was trying to scratch things down  
4 because I don't go nearly as fast as Heather does.  
5 You said that the State takes administrative action to  
6 -- to prohibit illegal diversions. That was one  
7 thing, I think; is that correct?

8           A.     Yes. Yes.

9           Q.     What are illegal -- what are illegal  
10 diversions?

11          A.     It can be a broad term, but I -- what I meant  
12 in particular was diversions by people who don't have  
13 water rights.

14          Q.     Okay. And how often has that occurred in the  
15 last ten years?

16          A.     I believe we've been -- had a case sort of  
17 dragging for a number of years involving an illegal  
18 river pumper that was shut down.

19          Q.     Okay. And you mentioned that in -- can you  
20 think of any other -- aside from the river diverter  
21 that you're talking about that action was taken  
22 against, can you think about -- of any other  
23 situations in which illegal diversion -- diverters  
24 were attempted to be shut down?

25          A.     As far as diversions without water rights,

1 that's the most recent case I know of. I think there  
2 have been other cases involving maybe the highway  
3 department pumping water out of the river without a  
4 water right, and I believe we had some dealings with  
5 IBWC about their diversions from the Rio Grande  
6 without water rights.

7 Q. All right. The second thing you mentioned  
8 was over diversions, and as I understand it, over  
9 diversions, as you've defined it, is taking water in  
10 excess of the permitted 4-and-a-half or 5-and-a-half  
11 acre-feet per acre; is that correct?

12 A. That's correct.

13 Q. Okay. And what's the -- what's the process  
14 for -- run me through how that occurs. You've got a  
15 pumper, and let's say in 2019, that pumper exceeded --  
16 took too much water. That's just sort of my starting  
17 point for this. I don't care what the number is.  
18 Let's say you took 6 acre-feet. I don't care. How  
19 would the -- how would that enforcement occur? Is it  
20 -- is the over diversion determined in realtime or at  
21 the end of the irrigation season?

22 A. Most often, it is determined at the end of  
23 the irrigation season. In some instances, the water  
24 master has enough data to tell that someone is  
25 approaching their limit and tries to work with them

## E X A M I N A T I O N

BY MS. KLAHN:

Q. All right. I'm Sarah Klahn. I represent the State of Texas. I have a few follow-up questions from what Mr. Dubois asked you. At the beginning of the deposition, he asked you what you had done to prepare for the deposition, and you mentioned looking at the AWRM statute and the statewide framework rules. Which section of your topics that you're authorized to testify about on behalf of the State of New Mexico do -- do you understand the AWRM statute and framework rules to fit under? And feel free to -- I think it was Exhibit 1.

A. I think I've got a copy. I believe it's C.

Q. Okay.

A. 1, 2, and 3.

Q. And the water master order was another document you specifically mentioned?

A. Yeah.

Q. That would be under Topic C or Topic D?

A. I'd say it relates to C.

Q. Okay. What documents did you review related to Topic D, the first bullet point in Topic D?

A. I don't know that I reviewed any document specifically for that point in addition to the ones I

1 was reviewing for Topic C.

2 **Q. So as far as New Mexico's policies relating**  
3 **to the administration of water delivered to EBID**  
4 **pursuant to the 1938 contracts, what policies would**  
5 **you point to that New Mexico has related to that**  
6 **administration?**

7 A. Well, the same policies and administration  
8 mechanisms that I described earlier, the same policies  
9 and administrative mechanisms we use for all water  
10 rights in the Lower Rio Grande.

11 **Q. So you don't distinguish between the contract**  
12 **water delivered as part of Texas' Compact entitlement**  
13 **and just a routine state water right?**

14 A. So when I look at D1, it talks about New  
15 Mexico policies relating to the administration of  
16 water delivered to EBID pursuant to the 1938  
17 contracts, the '70/80 operation and maintenance  
18 transfer contracts, and the 2008 operating agreements.  
19 Your question talked about delivery to Texas.

20 **Q. No my question was -- I'm limiting my**  
21 **question, first of all, to the first clause in that**  
22 **bullet point, and that's New Mexico's policies related**  
23 **to administration of water delivered to EBID pursuant**  
24 **to the 1938 contracts between --**

25 A. Okay.

1           Q.    -- the United States and the districts. I'll  
2 stop. That's all I want to talk about right now.

3           A.    Okay. And delivery to EBID, though, you're  
4 talking about delivery to Texas?

5           Q.    The water that is delivered to EBID under the  
6 contract is -- gets there as part of the Compact  
7 entitlement that Texas is receiving in the Elephant  
8 Butte reservoir; is that how you understand it?

9           A.    Yeah. I guess -- I guess there is that --  
10 that relationship, that the Compact delivery to  
11 Elephant Butte is indeed described as delivery to  
12 Texas. Yes. Okay. I'm following you.

13           Q.    And the water that Texas is entitled to in  
14 Elephant Butte Reservoir is the water that but for the  
15 amount that EBID is entitled to under its contract on  
16 New Mexico treaty, correct?

17                   MR. WECHSLER: Object to form.

18                   This is beyond the scope of her -- her  
19 subjects.

20           MS. KLAHN: I'm trying to establish the  
21 foundation to ask the question I asked five minutes  
22 ago and trying to see if she understands the -- what  
23 I'm asking. So that's where I'm going with this.

24           A.    The administration of water below Elephant  
25 Butte Reservoir is the same for all of the water



1 rights below Elephant Butte Reservoir. We do not have  
2 a special administration for water associated with  
3 water released pursuant -- that had been stored as  
4 part of Texas' entitlement under the Compact.

5 Q. (BY MS. KLAHN) Okay. I'm going to work  
6 backwards through the transcript and ask you some  
7 follow-up questions about some things that Mr. Dubois  
8 asked you. So that's what I'm doing is looking for  
9 the spot. Towards the end of his questioning, he  
10 asked you a question about the -- whether it was New  
11 Mexico's position that New Mexico is the party that  
12 would get to determine whether a complaint from Texas,  
13 I think, was the point of his question at that point  
14 was valid, and you went on to say that depletions that  
15 occurred do not -- do not necessarily result in  
16 impairment. Do you recall that?

17 A. Yes. I recall it.

18 Q. In the context of this litigation, both sides  
19 have conducted groundwater modeling, which shows that  
20 the groundwater pumping in New Mexico was depleting  
21 the surface water of the Rio Grande; would you agree?

22 A. Yes.

23 Q. And would you also agree that even though  
24 there's no disagreement, that New Mexico groundwater  
25 pumping's depleting the Rio Grande, New Mexico doesn't

1 believe that the depletions impair Texas -- Texas'  
2 entitlement; is that right?

3 A. We certainly do not believe there's a  
4 one-to-one relationship between depletions and  
5 impairment to Texas.

6 Q. What is the relationship?

7 A. It's very complex, and it depends on the  
8 water supply conditions and the operations of the Rio  
9 Grande Project. That's why we have the two -- you  
10 know, the integrated model system in order to simulate  
11 all of those parts of the system.

12 Q. So are some of those model runs, runs that we  
13 should consider to be New Mexico's admission that  
14 there's impairment to Texas?

15 MR. WECHSLER: Object to form.

16 A. I -- no. I think those model runs provide  
17 quantitative results that would then feed into any  
18 impairment determination.

19 Q. (BY MS. KLAHN) So speaking for New Mexico,  
20 your position is that there is some impairment, but  
21 you're looking to the Special Master to figure out  
22 what that is; is that right?

23 MR. WECHSLER: Object to form. That  
24 mischaracterizes her prior testimony.

25 A. Yes. I do not agree with what you said.

1     impairment, but it's complicated; is that right?

2           A.     No.

3                   MR. WECHSLER:  Object to form.  Again,  
4     mischaracterizes her testimony.

5           Q.     (BY MS. KLAHN)  So what did your statement  
6     mean a minute ago that New Mexico doesn't believe  
7     there's a one-to-one relationship between depletions  
8     and impairment?

9           A.     That just because depletion occurs does not  
10    mean that there is impairment downstream.

11          Q.     So is it New Mexico's position that there's  
12    no impairment to Texas from groundwater pumping in New  
13    Mexico?

14          A.     I am --

15                   MR. WECHSLER:  Object to form.

16          A.     -- not empowered to testify on behalf of the  
17    State of New Mexico on that topic.

18          Q.     (BY MS. KLAHN)  So, again, towards the end of  
19    Mr. Dubois' examination, he was asking you about the  
20    State of New Mexico's administrative tools, if you  
21    will, for assuring delivery of project water to EBID  
22    and EPCWID, and your answer was that, "Water rights  
23    are administered in order to protect existing water  
24    uses and senior water rights, including the water  
25    rights associated with deliveries with the Compact,

1 but the administration we do is not aimed at  
2 particular deliveries." I wanted to follow up with  
3 that. How can there be administration of water rights  
4 that isn't aimed at particular deliveries? What do  
5 you mean by that?

6 A. Well, that would seem to be part of the  
7 question that Mr. Dubois was asking, what  
8 administration did we do to protect particular  
9 deliveries or particular flows, and the administration  
10 we were performing in the -- in the Lower Rio Grande  
11 is not aimed at protection of particular flows or  
12 deliveries. Instead, it is normal water rights  
13 administration that is aimed at over diversions,  
14 stopping illegal diversions, not permitting additional  
15 appropriations of water and so on and so forth, not  
16 allowing transfers that would impair existing water  
17 rights, all in the service of protecting existing  
18 water rights and senior right -- water right holders.

19 Q. So is the sense then that if you do those  
20 things, everything's going to be fine, and you don't  
21 have to worry, and if somebody has a complaint,  
22 they'll come to the state engineer and say you need to  
23 curtail because I'm not getting my water?

24 A. Typically, if more active water rights  
25 administration in priority is to occur, it is as a

1 result of a complaint of a senior who is not receiving  
2 their water, yes.

3 Q. You mentioned a couple of times this concept  
4 of water users getting together and developing an  
5 alternative scheme. You also mentioned a pilot  
6 program. Describe the pilot program and this  
7 alternative scheme that you were referring to in your  
8 testimony today.

9 A. Well, we did not have a fully developed  
10 alternative scheme in the Lower Rio Grande. We -- at  
11 the moment, we have a pilot program, which there are  
12 hopes that might turn into the basis for an  
13 alternative administration scheme. The existing pilot  
14 program involves money from the State of New Mexico  
15 that would be available to pay farmers in order to  
16 fallow actively irrigated acreage and thereby reduce  
17 groundwater depletions.

18 MS. KLAHN: Kayla, could you pull up the  
19 document that is called ISC fallowing update? I'm  
20 going to shut the door, so people can't hear my dogs  
21 barking.

22 (Exhibit No. 2 was marked.)

23 Q. (BY MS. KLAHN) Can you see that?

24 A. Yeah.

25 Q. Okay. I can't because I think I've made my

1 Zoom thing go away again, but if you have control of  
2 that, let's take a look at that together. This should  
3 be marked as Exhibit 2, I think. Is that right?

4 A. Yes.

5 Q. Have you seen this memorandum?

6 A. I think I saw a draft of it.

7 Q. When was that?

8 A. Back in July.

9 Q. Did you review this before your deposition  
10 today?

11 A. No.

12 Q. If you'd go down with me to -- it's a cover  
13 memo, which the ISC staff apparently sent to the  
14 Interstate Stream Commission asking for approval of  
15 this project and then the report that follows is  
16 provides some examples, as I understand it, of other  
17 efforts around the west that the consultant was  
18 looking at.

19 A. I haven't read that report.

20 Q. Are you familiar with any of the example  
21 projects that the ISC staff are using as a basis for  
22 the recommendation?

23 A. I'm -- I'm familiar --

24 Q. Go to PDF Page 12 -- 11, sorry.

25 A. PDF Page 11. I have some familiarity with

1 the Fort Sumner Irrigation District program, though  
2 I've never worked on it. I am -- have some  
3 familiarity with the Lower Arkansas Super Ditch. I  
4 was and had presentations by people involved in that  
5 system. I'm not familiar with the Upper Colorado  
6 River System Conservation Program. I am familiar with  
7 the Rio Grande Water Conservation District Subdistrict  
8 No. 1. I've been up there, and I've also attended  
9 meetings in which people involved in that system have  
10 presented information on how -- how it works.

11 Q. Are any of these projects mandatory for the  
12 water users; do you know?

13 A. Not to my knowledge.

14 Q. Is that the concept that New Mexico's looking  
15 at, a voluntary project in the Lower Rio Grande?

16 A. Well, the pilot project is indeed voluntary.  
17 A farmer wants to get money for fallowing voluntarily  
18 would apply and the alternative administration  
19 discussions I have been involved with have also  
20 involved voluntary -- voluntary systems by which money  
21 is paid to farmers who agree to fallow.

22 Q. Did this pilot project -- project arise  
23 because of the litigation between Texas and New Mexico  
24 in this case?

25 MR. WECHSLER: Object to form;

1 foundation.

2 Q. (BY MS. KLAHN) Do you know?

3 A. There were a lot of reasons that it has come  
4 about in part due to the hydrologic conditions and  
5 dropping groundwater levels in the -- the Lower Rio  
6 Grande in New Mexico, and it's also because of the  
7 current litigation and a lot of different causes that  
8 are all related to each other.

9 Q. Is the price that New Mexico is looking at  
10 paying equivalent to what a pecan farmer could get if  
11 he kept his trees in production; do you know?

12 A. I don't know.

13 Q. Is the expectation that pecan farmers  
14 wouldn't participate in this because they have  
15 permanent cover crop?

16 A. That is the expectation, though we believe  
17 it's possible that there may be some orchards that are  
18 not doing well that might end up in the program.

19 Q. Has the State of New Mexico done any  
20 evaluation of potential folks who would want to  
21 participate in this based on what's known about the  
22 problems they are having in their production or  
23 something like that?

24 A. I do not think we have done any evaluation of  
25 that nature about individual farmers' situations.



1           Q.   How about any evaluation of potential acreage  
2   that might be persuaded to get into this?

3           A.   We have done evaluations of what potential  
4   acreage we would consider for the program on the basis  
5   of irrigation status, but we have not done any formal  
6   evaluation of individual farmer interests.  Instead,  
7   we -- this program is being run together with the  
8   Lower Rio Grande Water Users Group, and there have --  
9   I believe that the water users group entities have  
10   been working with the farmers and have information as  
11   to interest among the farmers.

12          Q.   When you said at the beginning of your answer  
13   there that you have -- the I -- the State of New  
14   Mexico has done evaluations of what potential acreage  
15   you'd consider for the program on the basis of  
16   irrigation status, what does that mean?

17          A.   We have evaluated historical irrigation of  
18   acreage on an acre-by-acre basis from the remote  
19   sensing, NDVI, and other analysis done mostly as part  
20   of the litigation technical work in order to ensure  
21   that we are not paying the fallowed acre that is not  
22   being irrigated.

23          Q.   I see.  Would the goal be to fallow acreage  
24   that is using a lot of water so you'd get a lot of  
25   bang for your buck?

1           A.    I believe the program will treat acreage  
2           equally.

3           Q.    So it wouldn't pay more for land that was  
4           fallowing or basically wouldn't pay more for -- for  
5           ground that's not going to be using a lot of water, if  
6           you will?

7           A.    I believe we are not making that distinction.  
8           I believe that all land that is -- satisfies the  
9           requirement for irrigation, having been irrigated,  
10          will be treated equally.

11                   MS. KLAHN: Kayla, could you pull up  
12          that deposition exhibit that Yolanda sent to you this  
13          morning? It was a single-page agenda item -- or  
14          agenda, sorry.

15                   THE VIDEOGRAPHER: Let me make sure I'm  
16          pulling up the right one. Hold on.

17                   MS. KLAHN: It should say groundwater  
18          conservation pilot program. It's a JPEG.

19                   (Exhibit No. 3 was marked.)

20           Q.    (BY MS. KLAHN) And you have to tell me if  
21          it's up because I can't see it.

22           A.    I can see it. It's up.

23           Q.    And is it the document that relates to some  
24          meetings that are scheduled for next week?

25           A.    Yes, it is.

1           Q.    Okay.  How many meetings like this has the  
2   State of New Mexico had in the Lower Rio Grande; do  
3   you know?

4           A.    So there have been internal meetings between  
5   the state and water user group representatives and  
6   lawyers.  There have been a number of them, but I  
7   don't know how many.  There have been no public  
8   meetings, as yet, to my knowledge.

9           Q.    So even though this is going to be online,  
10   this is the first public -- set of public meetings  
11   that's scheduled?

12          A.    To my knowledge, that is true.

13          Q.    Do you have any understanding of the feedback  
14   that farmers have given to the state about this,  
15   farmers that you've been talking to anyway?  What have  
16   they said about this program?

17          A.    My understanding is that the water users  
18   group entities, which include the New Mexico diverse  
19   crop farmers have been involving their farmers in  
20   these plans and that they believe there is interest in  
21   participation in this program.

22          Q.    In the absence of the pilot project, does --  
23   is it your understanding that the state engineer could  
24   authorize a local group of water users like in the  
25   Lower Rio Grande to come up with their own alternative

1     **scheme for administering water rights?**

2                   **MR. WECHSLER:** Object to form.

3           A.     Yes. I believe that it would be possible for  
4 another group of water users to organize and come up  
5 with an alternative administration scheme, which if  
6 acceptable to the state engineer, could be approved as  
7 alternative administration.

8           **Q.     (BY MS. KLAHN) Would that be under the AWRM**  
9 **statute?**

10          A.     Yeah. Yes, it would.

11          **Q.     And that was an effort that was begun maybe**  
12 **ten years ago or 15 years ago, not long after the AWRM**  
13 **statute was adopted down in the Lower Rio Grande,**  
14 **right?**

15          A.     What do you mean, what -- what effort?

16          **Q.     That wasn't a very com -- understandable**  
17 **question. I apologize. I'm remembering a PowerPoint**  
18 **that you did for the Lower Rio Grande water users**  
19 **group from 2006 about 15 years ago was when the state**  
20 **was looking at adopting local AWRM regulations; is**  
21 **that correct?**

22          A.     That's correct. So you're right. Shortly  
23 after the passage of the AWRM statute and -- and the  
24 promulgation of the AWRM general framework regs, we  
25 did do a push to try and get district-specific rules

1 in place in the Lower Rio Grande but that did not come  
2 to fruition.

3 MS. KLAHN: Kayla, I e-mailed you an --  
4 an exhibit that was marked in the Thacker deposition.  
5 Could you pull that up.

6 THE VIDEOGRAPHER: Okay. It's pulled  
7 up. I'm just going to mark it now.

8 MS. KLAHN: Thank you.

9 (Exhibit No. 4 was marked.)

10 MS. KLAHN: So this is going to be  
11 Barroll 3 -- 4, right?

12 THE WITNESS: 4.

13 Q. (BY MS. KLAHN) Could you turn in this  
14 document back to -- the document is Bates numbered,  
15 and it -- you're welcome to take a look at it. It's a  
16 packet of material we received from New Mexico in  
17 discovery. It's Bates numbered, and it starts out  
18 with while metering requirements. But if you go back  
19 to New Mexico No. 210807, there's objectives -- list  
20 of objectives. I don't know if you can hear my dogs.  
21 I apologize. They're keeping us safe from the  
22 mailman.

23 A. 807. Okay. Let me see if I can rotate this  
24 sucker. I rotated it. Okay. So Objectives for Lower  
25 Rio Grande District-Specific Regulations.

1           Q.     So I want to draw your attention to Letter H.  
2     We've talked a lot today about administration and how  
3     it works with the Compact and -- Letter H on 210807  
4     says that one of the objectives for Lower Rio Grande  
5     District-Specific Regulations is to establish a system  
6     for administration as required to meet downstream  
7     interstate delivery entitlements.

8           A.     Yes.

9           Q.     Do you have an understanding what that  
10    objective was aiming for?

11          A.     My recollection is that at this time, I'm  
12    uncertain as to whether there was a down -- any  
13    Compact constraints or requirements below Elephant  
14    Butte due to the language of the Compact being silent  
15    or -- or, rather, at least not specifying -- sorry --  
16    not specifying delivery targets below Elephant Butte.  
17    So -- but we thought that that was possible to occur  
18    and also thought, I think at the time we were trying  
19    to be proactive, and we were trying to estimate what a  
20    reasonable downstream delivery would be based on the  
21    knowledge we had at the time and come up with an  
22    administrative scheme that would allow us to try and  
23    meet that.

24          Q.     If the -- are you familiar with the draft  
25    district-specific regulations, what the concept was

1 behind them?

2 A. Yes.

3 Q. Was it to drill groundwater wells within a  
4 certain distance from the river?

5 A. In those rules, we did have -- we did  
6 introduce a new administration scheme or propose a new  
7 administration scheme, supply administration, and I  
8 believe that was for a short-term temporary  
9 curtailment of wells that were close to the river.

10 Q. And what --

11 A. In order to support the Rio Grande Project.

12 Q. And what was the reason for that approximate  
13 -- or for that distance from the river for making them  
14 based on the distance from the river?

15 A. Because wells that are a significant distance  
16 from the river would not provide any effect on the  
17 river within the short periods of time we were  
18 thinking about the temporary administration.

19 Q. But the wells that are distant from the river  
20 are still depleting the river, just taking longer for  
21 the effect to hit the river, right?

22 A. Yes. This was a short-term administration  
23 and, therefore, we were focused on wells that would  
24 give a short-term response to the river.

25 Q. Was there any talk of curtailing or maybe not

## SIGNATURE OF WITNESS

I, PEGGY BARROLL, solemnly swear or affirm under the pains and penalties of perjury that the foregoing pages contain a true and correct transcript of the testimony given by me at the time and place stated with the corrections, if any, and the reasons therefor noted on the foregoing correction page(s).

Peggy Barroll 11/21/2020  
PEGGY BARROLL

Job No. 65834

10/21/2020 Deposition





1 behalf this deposition is taken, nor in the regular  
2 employ of this attorney; and I certify that I am not  
3 interested in the cause, nor of kin or counsel to  
4 either of the parties.

5  
6 That the amount of time used by each party at  
7 the deposition is as follows:

8 MR. DUBOIS - 01:16:41

MR. WECHSLER - 00:00:00

9 MS. KLAHN - 00:45:07

MR. HARTMAN - 00:00:00

10 MR. HICKS - 00:11:48

MS. BARNCastle - 00:00:00

11  
12  
13 GIVEN UNDER MY HAND AND SEAL OF OFFICE,  
14 this, the 31st day of October, 2020.

15 

HEATHER L. GARZA, CSR, RPR, CRR

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1           **Q.     (BY MS. KLAHN)   Where did I go wrong?**

2           A.     I did not say that there was some impairment.  
3     I said, instead, that the quantitative results coming  
4     out of the model would then be used in an impairment  
5     calculation determination.

6           **Q.     A few minutes ago, you told me that you don't**  
7     **-- that New Mexico doesn't believe there's a**  
8     **one-to-one relationship between depletions and**  
9     **impairment and then you went onto tell me that the**  
10    **relationship is very complex and referred to your**  
11    **modeling. Is it -- is it your position as the State**  
12    **of New Mexico that any of your modeling provides a**  
13    **basis for finding impairment to Texas?**

14           **MR. WECHSLER:**   Object to form.

15          A.     We believe that our modeling is the best  
16    quantitative calculation of the effects of pumping in  
17    Texas and in New Mexico on the Rio Grande Project and  
18    thereby on -- on Compact -- on the Compact equities or  
19    deliveries or performance.

20          **Q.     (BY MS. KLAHN)   That didn't answer the**  
21    **question.**

22          A.     I think that our model does form the best  
23    basis for any findings related to impairment.

24          **Q.     And based on your earlier answer, it's the**  
25    **State of New Mexico's position that there's some**

Page.line	Change From	Change to	Reason
13.10	Hotstef	Hohstadt	Transcript error
14.3-4	"which have been adopted and were succeeded in the constitution and in the New Mexico Supreme Court."	"which have been adopted and were upheld by the New Mexico Supreme Court."	Transcript error/ I misspoke
15.19-20	"New Mexico has the responsibility no to interfere with at or not to – or to ensure that that can occur to work in _"	"New Mexico has the responsibility to ensure its legal and regulatory framework allows Reclamation to deliver Project and Compact waters"	Clarification
15.24-16.1	"To work in concert with Reclamation when it comes to whatever is necessary surface water distribution of the project."	"To work in concert with Reclamation as necessary to assist in the delivery of surface water by the project."	Clarification
18.1-2	"it is, in fact, usable water or project supply."	"it is, in fact, project water, or project supply."	Clarification
24.9		Add to end: "Furthermore, the normal operations of the project, as understood by New Mexico, ensure that project users are delivered what they order. Reclamation adjusts Project releases to ensure the water that has been ordered is in fact delivered, regardless of contemporaneous gains or losses to the stream system."	My answer was incomplete
32.17-24	"A. Water users are -- water users in New Mexico cannot divert water that they're not entitled to and so that water users who do not have legal authority cannot divert surface water away from the Rio Grande project if groundwater use is impacting the Rio Grande project, then it would be necessary to, I believe, New Mexico would have to --sorry. Groundwater use depleting the project were alleged, it would have to be investigated and demonstrated. Groundwater depletions negatively impacting the project demonstrated the New Mexico remedied the priority administration, but this has not occurred."	"A. Water users in New Mexico cannot divert water that they are not entitled to. Water users who do not have legal authority cannot divert surface water away from the Rio Grande project. If it is alleged that groundwater use in New Mexico is impairing the project, then New Mexico would investigate it, and if necessary, remedy it."	Incomplete answer, transcript error
37.7	"information"	"investigation"	Transcript error

37.17-18	"And I say all water rights would be curtailed..."	"When I say water rights would be curtailed..."	Transcript error
39.7	"No."	"Some model runs that have be made in current studies can address this issue."	Incomplete answer
39.23		Add to end: " However, stream depletions calculated by a groundwater model alone cannot determine the actual change in the flows in the Rio Grande because the flow of the Rio Grande to Texas is controlled by Reclamation's operations of the Rio Grande project, which changes response to changes in gains and losses to the stream system."	Incomplete answer
46.15		Add "In part it would depend on the nature of the call. If it were a call based on instantaneous under-delivery of water to Texas, such that Texas was not receiving its Compact apportionment, New Mexico would evaluate the evidence, and rapidly work to resolve the under-delivery by whatever means necessary, ideally in cooperation with Reclamation. If it were a call based on deficits to Project performance or Project efficiency caused by New Mexico, then a more comprehensive evaluation would probably be necessary, but much of the work needed for such an evaluation has taken place as part of past and present hydrologic studies by New Mexico.	Incomplete answer
46.20	"That's right. The state engineer-- Q. And how long would -- go ahead. I'm sorry. A. The state engineer would make a determination as to what amount of curtailment was necessary, what volume of water, say, was necessary to address the call and probably involving use of groundwater models to take into account any delays as to when the water -- the water associated with curtailing groundwater rights would show up back in the river and would come up with -- he would be tasked with determining the administration date and water rights junior to that date would be curtailed."	"That's right. In the case of a call to address an immediate shortfall in delivery to Texas, New Mexico would take whatever steps were necessary to address that shortfall, which might involve other measures than curtailment of groundwater use, because of the delays inherent in groundwater impacts on surface water flows. In the case of a call based on impacts to Project performance or efficiency caused by New Mexico, the state engineer would made a determination as to what amount of curtailment of water use is necessary based on water rights data, and probably model results as well. Based on this analysis the state engineer would determine an administration date, and water rights junior to that date would be curtailed."	Unclear and incomplete answer.

47.9	"I don't know." But the tools we've developed as part of settlement talks and as part of our litigation have definitely made it within striking distance that we should be able to perform such an analysis expeditiously."	"Again, it depends on the type of priority call. In that case of a call made to alleviate an immediate shortfall of water to Texas, so that Texas is not receiving its Compact apportionment, New Mexico would act in a matter of days, to address this shortfall. The actions taken by New Mexico to address such a shortfall may or may not include curtailment of groundwater use, due to the inherent delayed impacts of groundwater pumping on surface water. For a call made by Reclamation to address deficits in project performance or efficiency caused by New Mexico, the more comprehensive analysis required would probably take a longer amount of time, but given the amount of work New Mexico has already done in this area, it should be achieved relatively expeditiously."	Unclear and incomplete answer.
61.5-6	"and it's also because of the current litigation and a lot of different causes that are all related to each other."	"The current litigation is related to the same issues: dropping groundwater conditions in the Mesilla basin."	I misspoke: my language was unclear.
80.13-14	"To provide you information about New Mexico's policies and the information required under Section C."	"The purpose of my testimony is to provide you information about New Mexico's policies and the information required under Section C."	Transcript error

Signature: Peggy Barroll 11/21/2020

IN THE SUPREME COURT OF THE UNITED STATES  
BEFORE THE OFFICE OF THE SPECIAL MASTER  
HON. MICHAEL J. MELLO

STATE OF TEXAS,	§	
	§	
Plaintiff,	§	
	§	
vs.	§	ORIGINAL ACTION
	§	CASE NO.: 220141
STATE OF NEW MEXICO,	§	(ORIGINAL 141)
and STATE OF COLORADO,	§	
	§	
Defendants.	§	

\*\*\*\*\*

REMOTE VIDEOCONFERENCED DEPOSITION OF  
JOHN D'ANTONIO, P.E.  
AUGUST 14, 2020

\*\*\*\*\*

1  
2           REMOTE VIDEOCONFERENCED DEPOSITION OF JOHN  
3 D'ANTONIO, P.E., produced as a witness at the  
4 instance of the United States Department of Justice,  
5 and remotely duly sworn by agreement of all counsel,  
6 was taken in the above-styled and numbered cause on  
7 August 14, 2020, from 9:03 a.m. to: 3:06 p.m. before  
8 Karen L. D. Schoeve, RDR, CRR, reported remotely by  
9 computerized machine shorthand, pursuant to Section  
10 5.4 of Appendix C of the September 6, 2018 Case  
11 Management Plan, as amended (CMP) and the provisions  
12 stated on the record or attached hereto; that the  
13 deposition shall be read and signed.

14  
15           This deposition is being conducted remotely  
16 regarding the COVID-19 State of Disaster status of  
17 the world.

18  
19           REPORTER'S NOTE: Please note that due to the  
20 quality of the transmission data for a Zoom video-  
21 conference, overspeaking causes audio distortion  
22 in the testimony when preparing a videoconference  
23 transcript.

24  
25



1           Please be advised that an UNCERTIFIED ROUGH  
2 DRAFT version of this transcript exists. If you are  
3 in possession of said rough draft, please replace it  
4 immediately with this CERTIFIED FINAL TRANSCRIPT.

5

6           Quotation marks are used for clarity and do  
7 not necessarily reflect a direct quote.

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FOR THE ALBUQUERQUE BERNALILLO COUNTY WATER UTILITY  
AUTHORITY AND THE CITY OF LAS CRUCES:

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ALSO PRESENT:

Al Blair  
Shelly Dalrymple  
Peggy Barroll  
Susan Barela  
Greg Ridgley  
Aryan Singer  
Ian Ferguson  
Fred Cortez  
Michelle Estrada-Lopez

ALSO PRESENT:

Christian Barrett, Videographer

THE COURT REPORTER:

Karen L. D. Schoeve  
Certified Realtime Reporter  
Registered Diplomat Reporter  
Realtime Systems Administrator

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10	Regulations Providing for Active Water		
11	Resources Administration of the Waters of the		
12	Lower Rio Grande WaterMaster District, dated		
13	06/28/06		
14	Bates stamped NM_00075441 - 75500		
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16	Exhibit JD-016		61
17	State of New Mexico's Counterclaims in the		
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1 P R O C E E D I N G S

2 THE VIDEOGRAPHER: The time is  
3 9:03 a.m., and we are on the record.

4 JOHN D'ANTONIO, P.E.,  
5 having been previously sworn to tell the truth, the  
6 whole truth, and nothing but the truth, so help him  
7 God, testified further:

8 EXAMINATION

9 BY MR. LEININGER:

10 Q. Good morning, Mr. D'Antonio. My name's  
11 Lee Leininger. You may recall at the end of your  
12 last three days of deposition, I was continuing to  
13 ask you questions. So you are still under oath.

14 You understand that?

15 A. I do.

16 Q. Okay. And basically, the same rules and  
17 procedures apply. We'll go for about an hour here,  
18 take a break, or we can take a break whenever you  
19 request, you or your attorney.

20 Is that okay?

21 A. That's fine.

22 Q. And just as a last matter, I think at the  
23 end of the last deposition, there were a number of  
24 other attorneys representing various parties that  
25 also wanted to ask you questions, so I'm going to

1 application to pecans.

2 So let's start there. Is the 4.5, 5.5  
3 a basin-wide average, or is it only applicable to  
4 pecans?

5 A. Well, it's not a basin-wide average. It's  
6 what was allowed for the farmers down there to -- a  
7 time to put water to beneficial use so that we could  
8 adjudicate their water rights.

9 And so I think the basin-wide  
10 average -- according to metering records -- and I  
11 haven't checked on this lately, but according to the  
12 metering records and the fact that 80,000 acres has  
13 been -- it's gone from 90,000 to 80,000, it's  
14 probably 70 or 75,000, there's been a reduction in  
15 acreage also.

16 So from my understanding -- and you  
17 probably have to talk to some of the experts down  
18 there, but my understanding is we're still very  
19 close to that 4 acre-foot per-acre average as a  
20 basin-wide average, even today.

21 Q. Okay.

22 A. So, yeah, those numbers are higher. They  
23 had an ability to prove up to higher. But, again,  
24 going back to the basins, the measure, and the limit  
25 of a water right is what's being put to beneficial



1 use, and those were deemed reasonable numbers with  
2 respect to the adjudication and this particular  
3 Settlement Agreement.

4 **Q. So row croppers could prove up to 4.5 and**  
5 **5.5 for beneficial use under this agreement?**

6 A. They could have. They actually had less  
7 time, I believe. They had to file a notice of  
8 intent fairly quickly, and I think they had maybe a  
9 year to show it, whereas the pecan -- and the pecans  
10 added extra time because of what I stated earlier,  
11 the young pecans don't use much water; but as the  
12 full canopy grows, they require additional water  
13 use, and so that was -- they were given until, I  
14 believe it was March of 2019, somewhere around  
15 there, to prove their beneficial use.

16 But, yeah, the diversified row  
17 croppers had an ability also to go. But if they  
18 were planting their normal crops, they weren't going  
19 to exceed that. And what was really nice about it  
20 is we had the metering order in place so that we  
21 could verify beneficial use with respect to pumping  
22 records, and in combination with their surface water  
23 allocations at the time of them proving up what  
24 their water rights are.

25 **Q. Okay. So let's go, then, to -- I realize**

1 I wrote down the wrong page number here. Sorry.

2 Perhaps. Let's go to .pdf 65 on your transcript.

3 A. (Complied.)

4 Q. If we go down to line 7. And, again, I'm  
5 not going to read this into the record, but if you  
6 would familiarize yourself with this discussion.  
7 It's the beginning on line 7. And just read to the  
8 next page, line 9.

9 A. (Examined exhibit.) Okay.

10 Q. So your discussion here, I think Mr. Jones  
11 is asking questions regarding conjunctive use and a  
12 supplemental water right, and I'm trying to  
13 understand from your answer here what is the  
14 distinction and the similarities of those two.  
15 Let -- let's start with the conjunctive use.

16 If a farmer uses an FDR of 4.5  
17 acre-feet from a combination of groundwater and  
18 surface water, how is that a conjunctive use, and is  
19 that different from supplemental use of the  
20 groundwater to meet that conjunctive use?

21 Do you understand that question?

22 A. I think they're the same, as you have  
23 phrased that question, conjunctive use or  
24 supplemental use of the groundwater.

25 Q. So you say that a supplemental water right

1    here is an alternative supply to fulfill the  
2    original surface water supply; is that correct?

3           A.    Well, it depends on the individual farmer,  
4    too, whether or not they have combined rights, if  
5    they're on groundwater only, or if they have a  
6    surface and groundwater right, so --

7           Q.    Let's use that latter example where the  
8    farmer has surface and groundwater rights combined  
9    and wishes to apply 4.5 acre-feet per acre to his  
10   crops. Are you saying that the supplemental water  
11   to the groundwater is an alternative supply to  
12   fulfill the original surface water supply?

13                   MR. WECHSLER: Object to form.

14           A.    Well, what I'm saying is, is that it's  
15   a -- the farmer has the ability to pump up to that  
16   4.5 acre-feet, and he's got to combined ground and  
17   surface water right to make up the difference  
18   between what his right is and what's available on  
19   surface water.

20           Q.    (BY MR. LEININGER) Okay. And so do you  
21   get -- is he getting two water rights here under OSE  
22   & OSE guidelines and state law? Is he getting a  
23   right to groundwater pump, which is separate from  
24   the right to his surface water application?

25           A.    No. There's only one state law water

1 right here, and that's the groundwater piece. The  
2 surface water is variable, based on the project  
3 water that's available in any given year.

4 Q. Okay. So one water right to the  
5 groundwater, and that's -- you label that as a  
6 supplemental water right?

7 A. Well, you can call it supplemental.

8 Q. All right. Sorry. I'm wondering what the  
9 OSE calls it.

10 A. We just call it a groundwater -- it's part  
11 of a combined rights that the farmer has, part of  
12 its right to the surface water and then the right to  
13 the groundwater to supplement that right up that 4.5  
14 acre-feet.

15 Q. Okay. And so the groundwater priority  
16 data that's offered is the same as the surface  
17 water?

18 MR. WECHSLER: Object to form.

19 A. Well, in the case of the combined rights,  
20 I believe so, although I know -- I know the  
21 discussion that we've had is the groundwater rights  
22 are typically the date of drilling.

23 So I'd have to -- I'd have lean back  
24 on my District 4 group to look at any specific water  
25 rights to get the difference between those two in a

1 subject to other contracts under the Multiple  
2 Purposes Act -- am I saying that right? I don't  
3 know. The MPA, the act that allows for other water  
4 to be used by, say, the City of Las Cruces or others  
5 Miscellaneous Purpose Act. That's what it is.

6 **Q. Are you aware of Miscellaneous Use**  
7 **Purpose -- Purpose Use Act contract that Las Cruces**  
8 **has with the United States?**

9 A. No, I'm really not, but I think most of  
10 the Bureau of Reclamation has that ability to enter  
11 into both types of contracts.

12 **Q. And that presumably would be consistent**  
13 **with and pursuant to the contract that EBID has with**  
14 **the United States for use of water below Elephant**  
15 **Butte Reservoir; is that correct?**

16 A. Yeah, I think that's correct.

17 **Q. Let me ask quickly a couple of other**  
18 **questions that came out of some earlier questioning.**

19 I had asked you about the -- you're  
20 the Secretary of the Interstate Stream Commission,  
21 correct?

22 A. That's correct.

23 **Q. And you're also the State Engineer for the**  
24 **State of New Mexico, that's correct, right?**

25 A. That's correct.

1           **Q.    And I think you said that the Interstate**  
2           **Stream Commission will protest if it feels that an**  
3           **application might affect an interstate stream. Is**  
4           **that a correct statement?**

5           A.    Well, protest what? Protest an  
6           application?

7           **Q.    If it feels it will affect an interstate**  
8           **stream.**

9           A.    Mr. Somach, what I'm asking is you said  
10          that the Interstate Stream Commission will protest,  
11          and I'm asking what will they protest?

12          **Q.    An application.**

13          A.    An application, okay. I just want to make  
14          sure you're -- yeah, they have the ability to lodge  
15          a protest, based on effects -- any detrimental  
16          effects that could happen to a -- regarding the  
17          Compact.

18          **Q.    Okay. Now, let's assume for a moment that**  
19          **an application's been granted. Does the Interstate**  
20          **Stream Commission monitor an interstate stream to**  
21          **ensure that ongoing operations on that stream do not**  
22          **adversely effect New Mexico's ability to meet its**  
23          **obligations to a downstream state?**

24          A.    Well, the State Engineer's office and  
25          staff is the one that monitors the permits. They're

1 the ones that issue the permits. But they're --  
2 there's a presence down in the Lower  
3 Rio Grande and certainly we would share any  
4 information -- when I say "we," the State Engineer's  
5 office would share information with the ISC if we  
6 saw that there was a permit that was in  
7 noncompliance.

8 Q. And my question really focuses on -- and  
9 perhaps I should state it more specifically. Does  
10 the office of State Engineer have any kind of  
11 program or regulatory activity that's focused  
12 directly on insuring that New Mexico complies with  
13 the 1938 Rio Grande Compact and deliveries to Texas?

14 MR. WECHSLER: Object to form.

15 A. So I think the answer to that question  
16 would be if we -- we haven't noticed anything that  
17 adversely affects the deliveries to the State of  
18 Texas. In all those years, Texas never filed a  
19 complaint with me as Compact Commissioner or as  
20 State Engineer, for that matter.

21 They may have recently filed some  
22 protests on some applications that had been filed.  
23 But historically, I've never heard -- in 11-1/2  
24 years as a Compact Commissioner that New Mexico was  
25 underdelivering to the State of Texas.

1                   So I think for there to be a concern,  
2   number one, if the Compact -- there was a concern  
3   that Compact was not being adhered to, I think we  
4   would have heard, that there should have been  
5   constructive notice provided to me and inquiries  
6   made for us to start looking at it, because  
7   there's -- and that's kind of my answer.

8                   You know, I haven't -- like I said, if  
9   there's any noncompliance with the permits, we find  
10   out usually because there's metering requirements  
11   and reporting requirements and things of that  
12   nature. But totally unaware from the standpoint of  
13   being informed by Texas all those years that somehow  
14   we were underdelivering water to the State of Texas.

15           **Q.    (BY MR. SOMACH) Do I understand you to be**  
16   **saying that absent Texas providing notice to the**  
17   **State of New Mexico, there's no other mechanism that**  
18   **the State of New Mexico has to determine whether or**  
19   **not activities in New Mexico may be affecting the**  
20   **amount of water that Texas gets, pursuant to the Rio**  
21   **Grande Compact?**

22           **A.    No, that's not the -- that's not the**  
23   **only -- the only mechanism. But, again, when**  
24   **there's a full supply that's being delivered to the**  
25   **State of Texas, certainly from 1980 and 2002, and**



1 then we had a pretty severe drought that came in in  
2 2003, in which there were maybe two years there that  
3 Texas did not receive a full delivery.

4 It's hard to say -- and there  
5 certainly wasn't a concern that New Mexico was  
6 underdelivering to the State of Texas in any form or  
7 fashion. And we've got a number of tools in place  
8 that -- since 1980, conjunctively managing water  
9 requiring offsets to any surface water permits. You  
10 know, we've got guidelines in place on how the  
11 District governor administers applications and the  
12 requirements and how to condition them.

13 We put metering requirements in place  
14 and metering orders. We came in and -- all those  
15 years -- also the Interstate Stream Commission would  
16 monitor applications. We sort of have the checks  
17 and balances there; if there were any applications  
18 that were filed with the Interstate Stream  
19 Commission would have been concerned with, they  
20 would have filed -- they're not shy about filing a  
21 protest and they've done it in a number of basins.

22 And so when you look at everything  
23 that we've done in our intent to put, you know,  
24 district-specific regulations together, I know those  
25 questions have been asked and some litigation has

1 stopped us pursuing that. But all along the way,  
2 for the last 40 years, New Mexico has increasingly  
3 put in administrative checks on impairment issues.

4 We test whether -- again, if there's  
5 an impairment to an issue, and certainly, you know,  
6 as we look at the water rights that are associated  
7 with a project, they have some senior surface water  
8 rights. Those are protected. So there's a lot of  
9 protections in there.

10 And I think I might be straying afar  
11 from your question, but I think the point is you  
12 asked if there was any other mechanism the State  
13 of New Mexico puts in place that affects the amount  
14 of water that Texas gets. We're protecting  
15 New Mexico -- other New Mexico water users, which,  
16 by association also protects that water that's going  
17 to Texas.

18 MR. SOMACH: I'm done. I have no  
19 other questions that I need to ask. I don't know if  
20 anybody else does, but I'm all done.

21 Thank you. Mr. D'Antonio.

22 THE WITNESS: Thank you.

23 MR. WECHSLER: Any other questions?

24 Chad, do you have any questions?

25 MR. WALLACE: Perhaps I shouldn't, but

1 I just want to clarify one thing, Mr. D'Antonio.

2 EXAMINATION

3 BY MR. WALLACE:

4 Q. Several days ago, in one of your other  
5 iterations of the deposition, you had mentioned  
6 something about Colorado's obligations into the  
7 Compact.

8 A. Okay.

9 Q. And I just wanted to clarify, because I  
10 was confused as to the answer.

11 What is your understanding of where  
12 Colorado makes Compact deliveries under Article III  
13 of the Compact?

14 A. Well, it's -- it's the state line, as far  
15 as I'm concerned. They make delivers at the state  
16 line.

17 Q. And is that measured by the Lobatos gage?

18 A. Yes.

19 Q. And as far as Colorado's annual Compact  
20 credit, are those measured, again, by the volume of  
21 water the Colorado delivers as measured at the  
22 Lobatos gage?

23 A. My understanding is yes.

24 MR. WALLACE: That's all I have.

25 Thank you.

1 THE WITNESS: Okay.

2 MR. WECHSLER: Anything further?

3 (No response.)

4 MR. WECHSLER: Great. Well, thank you  
5 very much and have a good weekend.

6 THE VIDEOGRAPHER: The time is  
7 3:06 p.m., and we are off the record.

8

9 (Remote deposition concluded at  
10 3:06 p.m., August 14, 2020.)

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1 CHANGES AND SIGNATURE

2 WITNESS NAME: JOHN D'ANTONIO, P.E.

3 DATE: AUGUST 14, 2020

4	PAGE/LINE	CHANGE	REASON
5	18/15	change "basis" to "beneficial use"	Correction
6	18,15	change "basis to" to "basis, the"	Correction
7	18/18	change "FOPS" to "crops"	Correction
8	30/7	change "breaker" to "FDR"	Correction
9	35/15	change "there tells" to "there's"	Correction
10	41/1	change "travel" to "Tribal"	Correction
11	41/20	change "short-sharing" to "shortage sharing"	Correction
12	41/21	change "Galenas" to "Gallinas"	Correction
13	41/22	change "Nimbus" to "Mimbres"	Correction
14	43/13	change " at the" to "active"	Correction
15	44/5	change "it" to "I"	Correction
16	49/8	change "combat" to "compact"	Correction
17	56/6	change "AWR" to "AWRM"	Correction
18	56/7	delete "and the"	Correction
19	59/24	change "based on" to "place"	Correction
20	70/6	delete "monthly"	Correction
21	74/23	change "general" to "engineer"	Correction
22	90/6	change "legal" to "an illegal"	Correction
23	98/15	change "Raul" to "Rolf"	Correction
24	98/19	change "Rio" to "River"	Correction"
25	103/3	change "apply" to "comply"	Correction



1 I, JOHN D'ANTONIO, P.E., solemnly swear  
2 or affirm under the pains and penalties of perjury  
3 that the foregoing pages contain a true and correct  
4 transcript of the testimony given by me at the  
5 time and place stated with the corrections, if any,  
6 and the reasons therefor noted on the foregoing  
7 correction pages(s).

8

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JOHN D'ANTONIO, P.E.

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25 Job No. 65060

1           IN THE SUPREME COURT OF THE UNITED STATES  
           BEFORE THE OFFICE OF THE SPECIAL MASTER  
 2           HON. MICHAEL J. MELLOY

3   STATE OF TEXAS,                                 §  
    §  
 4                   Plaintiff,                     §  
    §  
 5   vs.   § ORIGINAL ACTION  
    § CASE NO.: 220141  
 6   STATE OF NEW MEXICO,                         § (ORIGINAL 141)  
   and STATE OF COLORADO,                       §  
 7   §  
    §  
    §  
    §  
 8                   Defendants.                     §

9                                 \*\*\*\*\*

10                               REPORTER'S CERTIFICATE  
 11                               REMOTE VIDEOCONFERENCED DEPOSITION OF  
 12                               JOHN D'ANTONIO, P.E.  
 13                               AUGUST 14, 2020

14                               \*\*\*\*\*

15           I, Karen L. D. Schoeve, Registered Diplomate  
 16   Reporter, Certified Realtime Reporter, and Realtime  
 17   Systems Administrator, residing in the State of  
 18   Texas, do hereby certify that the foregoing  
 19   proceedings were reported by me and that the  
 20   foregoing transcript constitutes a full, true,  
 21   and correct transcription of my stenographic  
 22   notes, to the best of my ability and hereby  
 23   certify to the following:

24           That the witness, JOHN D'ANTONIO, P.E., was  
 25   duly remotely sworn by the officer and that the



1 transcript of the oral deposition is a true record  
2 of the testimony given by the witness;

3 I further certify that I am neither counsel  
4 for, related to, nor employed by any of the parties  
5 in the action in which this proceeding was taken,  
6 and further that I am not financially or otherwise  
7 interested in the outcome of the action.

8 That the amount of time used by each party at  
9 the deposition is as follows:

10	R. Lee Leininger	- 02:41
	Stuart L. Somach	- 00:28
11	Chad Wallace	- 00:01
	Jeffrey Wechsler	- 00:00
12	Renae Hicks	- 00:58
	James Brockmann	- 00:00
13	John W. Utton	- 00:00

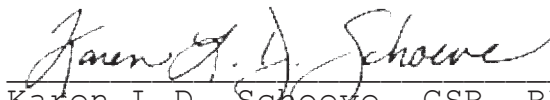
14

15 Subscribed and sworn to on this the 29th day of  
16 August, 2020.

17

18

19



20 Karen L.D. Schoeve, CSR, RDR, CRR  
21 Realtime Systems Administrator  
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23 NCRA Exp. Date: 09-30-21  
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IN THE SUPREME COURT OF THE UNITED STATES  
BEFORE THE OFFICE OF THE SPECIAL MASTER  
HON. MICHAEL J. MELLO

STATE OF TEXAS	)	
	)	
Plaintiff,	)	
	)	Original Action Case
VS.	)	No. 220141
	)	(Original 141)
STATE OF NEW MEXICO,	)	
and STATE OF COLORADO,	)	
	)	
Defendants.	)	

\*\*\*\*\*

REMOTE ORAL AND VIDEOTAPED DEPOSITION OF  
CHERYL THACKER  
SEPTEMBER 18, 2020

\*\*\*\*\*

REMOTE ORAL AND VIDEOTAPED DEPOSITION of CHERYL THACKER, produced as a witness at the instance of the United States, and duly sworn, was taken in the above-styled and numbered cause on September 18, 2020, from 1:33 p.m. to 4:42 p.m., before Heather L. Garza, CSR, RPR, in and for the State of Texas, recorded by machine shorthand, remotely at the offices of HEATHER L. GARZA, CSR, RPR, The Woodlands, Texas, pursuant to the Federal Rules of Civil Procedure and the provisions stated on the record or attached hereto; that the deposition shall be read and signed.

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## 12 VIDEOGRAPHER:

13 Ms. Kayla Brown

## 14 ALSO PRESENT:

15 Shelly Dalrymple  
16 Kari Olson  
17 Al Blair  
18 Greg Ridgley  
19 John D'Antonio  
20 Robin Cypher  
21 Gary Esslinger  
22 Erik Fuchs  
23 Estevan Lopez  
24 Daniel Ortiz  
25 Arianne Singer

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Collection of Documents Related to AWRM

Effort in Lower Rio Grande

1 THE VIDEOGRAPHER: The time is 1:33 p.m.  
2 We're on the record.

3 CHERYL THACKER,  
4 having been first duly sworn, testified as follows:

5 E X A M I N A T I O N  
6 BY MR. LEININGER:

7 Q. Will you please state your full name for the  
8 record?

9 A. Yes. It's Cheryl S. Thacker.

10 Q. Good afternoon. My name is Lee Leininger.  
11 I'm an attorney with the U.S. Department of Justice.  
12 I'm going to be starting this deposition today. I  
13 think I'll be followed by Ms. Klahn and then perhaps  
14 Ms. O'Brien, and there may be one or two others.  
15 Okay?

16 A. Okay.

17 Q. You've had your -- you've had your deposition  
18 taken many times before; is that correct?

19 A. Yes, sir.

20 Q. And so you understand the ground rules. I  
21 will just briefly go over those. Were you in  
22 attendance this morning when Mr. Dubois was beginning  
23 this deposition with Mr. Lopez?

24 A. Yes.

25 Q. All right. So he ran over some ground rules.



1 groundwater or is there a specific thing you're  
2 asking.

3 Q. Well, this term was used by -- you know who  
4 Mr. Serrano is?

5 A. Yes.

6 Q. And Mr. Dorman?

7 A. Yes.

8 Q. And in their depositions, they used the term  
9 over diversions. Did you, by chance, review their  
10 deposition testimony or did you -- did you  
11 participate? Were you present during their  
12 deposition?

13 A. No, I wasn't.

14 Q. Did you review the transcript?

15 A. No.

16 Q. Okay. So I will -- I will just state for  
17 these purposes that Mr. Serrano, in particular,  
18 referenced over diversions of water rights by  
19 irrigation users, and that is my question. It could  
20 be over diversion by surface water or could be over  
21 diversion of groundwater, but let's take these one at  
22 a time. Does the OSE monitor over diversion of a  
23 surface water by irrigation user in Elephant Butte  
24 Irrigation District?

25 A. We do not monitor the over diversion of

1 specific farmers of surface water.

2 **Q. How would you define over diversion?**

3 A. What we do here in the District 4 office is  
4 we monitor how much water is pumped from each well,  
5 and specific to a specific water right, and an over  
6 diversion would be that amount of water diverted that  
7 goes beyond their water right.

8 **Q. Okay. Looking at your answer here, you talk**  
9 **about monitoring of how much water is pumped from each**  
10 **well. Do you monitor how much water -- how much**  
11 **surface water is diverted by each water right holder?**

12 A. What we do is in our WATERS database, we  
13 include the allotments set by the surface water  
14 allotments set by EBID, and we just assume that every  
15 water user takes that full allotment of surface water,  
16 and then we make sure that the groundwater amount of  
17 water is constrained within the Stream System 101  
18 settlement agreement.

19 **Q. Okay. So the OSE does no administration of**  
20 **the amount of surface water that is beneficially used**  
21 **by each of the EBID farmers; is that correct?**

22 A. We just make the assumption that every EBID  
23 farmer takes their full allotment.

24 **Q. And the OSE does no monitoring of that or --**  
25 **well, let's just start there. The OSE does no**

1 monitoring of each farmer diversion of surface water?

2 A. Not in this office, we don't.

3 Q. With regard to groundwater, does the OSE  
4 monitor how much each farmer is diverting to the  
5 groundwater?

6 A. Absolutely.

7 Q. Okay. How do you go about doing that?

8 A. Well, we require metering all wells for  
9 irrigation purposes, as well as commercial and  
10 non-domestic purposes, and so for irrigation purposes  
11 in particular, we require quarterly meter readings and  
12 those meter readings are entered into our WATERS  
13 database, and that allows us to account for the amount  
14 of water each farmer is using.

15 Q. Okay. In your previous answer, you said with  
16 regard to ensuring there's not an over diversion, you  
17 make -- I'm looking at your answer here on Line 26:17.  
18 "We make sure the groundwater amount of water is  
19 constrained within the Stream System 101 settlement  
20 agreement." So how does -- how do the OSE then  
21 administer to constrain groundwater pumping within the  
22 Stream System Issue 101 settlement agreement?

23 A. Well, I'll go ahead and give you a scenario.  
24 In our WATERS database, we input for every farmer the  
25 amount of the allotment EBID has designated for that

1 year. So, for instance, if the amount of water the  
2 allotments from EBID surface water is 2 acre-feet per  
3 acre per annum, we input that into our WATERS  
4 database, and then we look at the Stream System 101  
5 settlement agreement, and we see for most farmers,  
6 they have a total FDR farm delivery requirement of 4.5  
7 acre-feet per acre per annum. So what we'll do is  
8 straight away, we assume that the farmer will use all  
9 the full 2 acre-feet per acre per annum, and what that  
10 does, we subtract that from the 4.5 farm delivery  
11 requirement, and that gives us a number stating that  
12 they have 2.5 acre-feet per acre per annum that can be  
13 diverted from their well or wells.

14 Q. If they exceed -- under your scenario, if  
15 they exceed the 2.5 acre-feet per annum, is that an  
16 over diversion?

17 A. It is.

18 Q. And how do you enforce against an over  
19 diversion?

20 A. Our water master, who is Ryan Serrano and his  
21 staff, will notify the farmer that is over diverting,  
22 and they will often red tag, literally put a red tag  
23 on the well, and there's also written correspondence  
24 to those farmers and they investigate and work with  
25 the farmer to rectify that over diversion.

1           **Q.    Is your well metering, is that realtime?**

2           **A.    It is not.  It's -- we require the farmers to**  
3           **submit their meter readings January, April, July, and**  
4           **October by the 10th of those months.**

5           **Q.    So let's say in July, you get a meter**  
6           **reading, and it appears that under this scenario which**  
7           **the farmer was entitled to 2.5 acre-feet per annum,**  
8           **pumping, and it's been exceeded, what -- what actions**  
9           **do you take when you get that information?**

10          **A.    Well, the water master again will contact**  
11          **that farmer and investigate the situation, for**  
12          **instance, talk to the farmer about, well, is -- is**  
13          **your meter working correctly, were the meter readings**  
14          **written down and submitted correctly.  Often, that's**  
15          **what happens.  The farmer will inadvertently report**  
16          **the meter readings incorrectly or there may be a**  
17          **metering -- there's -- a meter can be tenths or**  
18          **hundredths.  They may have a decimal place off.  So**  
19          **they'll -- the water master is real diligent about**  
20          **working with the farmers to make sure that those meter**  
21          **readings were entered correctly and submitted**  
22          **correctly.  And we'll also go out -- they will, not**  
23          **me, but the water masters will go out and inspect the**  
24          **wells and work with the farmer to make sure that that**  
25          **well is working correctly.**

1 Q. Okay. Let's --

2 A. And --

3 Q. I'm sorry. Go ahead. I didn't mean to  
4 interrupt.

5 A. No, that's okay. Go ahead.

6 Q. Let -- let's assume that the meter is reading  
7 correctly, that the well is working correctly, and the  
8 2.5, which is what should be the limit to groundwater  
9 pumping has been exceeded in July and you've got the  
10 meter reading, it's accurate, the water use is being  
11 exceeded, what does the OSE do to rectify this over  
12 diversion at that time?

13 A. So a water master will work with the farmer,  
14 and he will come up with a replacement plan so that  
15 that farmer will pay back that water. Typically it  
16 occurs in the following irrigation season.

17 Q. So is the -- is the farmer allowed to  
18 continue to pump?

19 A. No.

20 Q. In irrigation season?

21 A. I don't believe so, no.

22 Q. And how do you prevent farmer from pumping  
23 beyond that 2.5 after notification that they've  
24 exceeded their amount they're entitled to?

25 A. Well, the water masters go out and inform the

1 farmer that he can no longer pump that water from that  
2 well.

3 Q. And --

4 A. And then if there's -- if they refused to  
5 follow those instructions, it'll -- it can go to a  
6 compliance order and eventually to the administrative  
7 litigation unit for full compliance.

8 Q. Do you take any physical action at the time  
9 you're aware of the over diversion to prevent  
10 additional pumping that well had?

11 A. What do you mean by physical action?

12 Q. Do you lock it down so that --

13 A. I am not aware of locking that down. I would  
14 have to ask -- or you would have to ask Ryan Serrano.

15 Q. How many compliance orders do you typically  
16 issue every year?

17 A. I think there was between 10 and 20 a year.  
18 Not very many.

19 Q. That is the number of over diversions that  
20 you've discovered?

21 A. I believe that's the number of over  
22 diversions where the farmer hasn't come into our  
23 office and worked with our water masters to come up  
24 with a replacement water plan, and I think they --  
25 those are the folks that just refuse to cooperate.

1           Q.    So if I understand you correctly, then for  
2 farmers that agree to cooperate, there -- there is no  
3 compliance order issued and they're expected to  
4 account for their over diversion in their water use  
5 the following year?

6           A.    Well, this would depend on the arrangements  
7 they have with the water master and his group, but as  
8 far as I know, that's the way they handle it, and it  
9 needs to be in the following irrigation season.

10          Q.    So essentially in the -- these enforcement  
11 actions, the OSE checks the meter readings at the end  
12 of the year, and if the total meter diversion exceeded  
13 the farmers' water right for groundwater pumping  
14 purposes, that's when you'd take some action the  
15 following year to correct for that amount that was  
16 over diverted; is that correct?

17          A.    That's correct.

18          Q.    As long as the groundwater pumper was within  
19 this permitted amount, and I think you've defined this  
20 permitted amount as 4.5 acre-foot for most irrigation  
21 uses, subtracting off their surface water allocation,  
22 then they had a permitted amount of water to pump from  
23 the ground for that year; is that correct?

24          A.    Yes.

25          Q.    Okay. And as long as they are within that



1 permitted amount, there's no over diversion?

2 A. That's correct.

3 Q. So New Mexico only administers to the  
4 permitted amount in an irrigator's permit?

5 A. Well, it's not just water that's -- or excuse  
6 me a water right that's certainly permitted. We  
7 require metering on all irrigation -- all farmed, all  
8 meters -- water meters that irrigate and so this could  
9 be whether it's adjudicated, a water right might be  
10 adjudicated but not permitted specifically. It might  
11 be a water right that is declared but not specifically  
12 permitted, so I don't want to stop at saying it's just  
13 permitted water right.

14 Q. So New Mexico administers to water rights  
15 that are declared; is that correct?

16 A. Yes. If that's the only information we have  
17 on file of the water right unless it's been some other  
18 information, for instance, it's adjudicated, then yes.  
19 That's the best information we have.

20 Q. Are these declared rights un-permitted rights  
21 that were in existence prior to when the basin was  
22 declared?

23 A. Yes. They have to be water rights that were  
24 established prior to the closing of the basin.

25 Q. That was 1980?

1           A.     Correct.

2           Q.     So for these declared rights that New Mexico  
3 administers to, this is based upon what -- what proof  
4 of establishment beneficial use. How does OSE verify  
5 a declaration?

6           A.     Well, in the lower Rio Grande, we have the  
7 hydrographic survey, and so that was completed as part  
8 of the adjudication, and so that's essentially a field  
9 check that was done. So it's -- we can verify that's  
10 another way to look at the declaration and give some  
11 context to it and shore up the declaration  
12 essentially.

13          Q.     Okay. So for purposes of over diversion, you  
14 guys go through the same processes you do with  
15 permitted wells; you determine from the metering data  
16 whether or not they are exceeding their declaration?

17          A.     That's correct.

18          Q.     And then it's a similar process of  
19 enforcement, at the end of the year, you look to see  
20 how much water was pumped?

21          A.     Yes.

22          Q.     And then you may take action to limit the  
23 amount of water pumping in successive years?

24          A.     If it's -- yes.

25          Q.     How else do you settle these issues of over

1           Q.    Is that information you had understood coming  
2 into this deposition?

3           A.    I'm sorry.  What information?

4           Q.    That you're speaking for New Mexico today  
5 when you --

6           A.    Oh, yes.  I see.  Yes.

7           Q.    You did understand that coming in here today?

8           A.    I do.

9           Q.    So the -- the answers to your questions bind  
10 the State of New Mexico in the context of this  
11 litigation.  Does that make sense?

12          A.    That's the way I understand it.

13          Q.    Okay.  Very good.  Where are you right now?

14          A.    I'm in my office in Las Cruces, New Mexico.

15          Q.    Is there anyone in there with you?

16          A.    No.

17          Q.    Do you have your phone nearby?

18          A.    It's over in my desk.

19          Q.    Okay.  But you're not anywhere where you  
20 could consult with anybody by text message or  
21 something like that?

22          A.    No, ma'am.

23          Q.    Okay.  In the course of the discussion you  
24 had today with Mr. Leininger, he asked you some  
25 questions about the way that New Mexico administers

1 groundwater rights, and in the course of that  
2 discussion, you said something along the lines of  
3 this, you assume that EBID farmers are using their  
4 full allotment and then you evaluate their groundwater  
5 use based on the assumption that they're using their  
6 full allotment. Does that -- does that sound like  
7 testimony that you gave? I'm not -- I don't have it  
8 written down exactly.

9 A. Yes. That's right.

10 Q. Okay. So when you say you assume that EBID  
11 farmers are using their full allotment in the context  
12 of that statement, are you assuming that EBID farmers  
13 have 3 acre-feet per acre available to them every  
14 year?

15 A. Oh, no. I'm sorry. I meant the allotment  
16 that they announced per irrigation season, for  
17 instance, 2 acre-feet, you know, they announced that.  
18 That's what I was referring to.

19 Q. Okay. So -- and this evaluation that you're  
20 doing would happen at the end of the irrigation  
21 season?

22 A. Well, we include that at the beginning of the  
23 irrigation season when we get that information from  
24 EBID. So -- but the final accounting and final wrap  
25 up occurs at the end of the year, yeah.

1           Q.    So if EBID changes their allocation over the  
2   course of a season, your final tally of groundwater  
3   use would take that into account?

4           A.    We would, yes.

5           Q.    Now, based on the extended discussion that  
6   Mr. Wechsler had with Mr. Leininger at the beginning  
7   of the deposition, is it fair to say that you are not  
8   aware of specific activities New Mexico has done to  
9   enforce compliance with the Rio Grande Compact?

10          A.    That's absolutely right.

11          Q.    During your discussion with Mr. Leininger,  
12   you referred to tools in the toolbox a number of times  
13   when talking about the AWRM. Do you recall that?

14          A.    I do.

15          Q.    Could you list the tools in your toolbox for  
16   the AWRM?

17          A.    Sure. The metering order requiring all  
18   farmers and non-domestic users to meter their wells.  
19   We have the designation of the water master districts,  
20   the appointments of the water master. We have the  
21   water master reports that he does every year, and --  
22   and I think, you know, just the AWRM state regulations  
23   or -- yeah, regulations.

24          Q.    So the -- the AWRM -- let me strike that.

25                So regulations have been adopted on a

1 statewide basis to implement active water resource  
2 management in New Mexico; is that correct?

3 A. Yes, it is.

4 Q. How often do you find yourself consulting the  
5 AWRM regulations in your day-to-day?

6 A. I know they're there, but I don't use them on  
7 my day-to-day work.

8 Q. So it's a tool in the toolbox, but you don't  
9 use it?

10 A. I wouldn't say we never use it, but it's not  
11 something we use on a day-to-day administrative -- for  
12 administrative use.

13 Q. How many times in a year would you say you  
14 turn to the AWRM regulations?

15 A. Maybe twice a year.

16 Q. What would be an example of application of  
17 the AWRM regulations?

18 A. Well, I think it's just the basis where we  
19 can administer -- gives us the authority to administer  
20 under AWRM and use those tools that I mentioned  
21 earlier.

22 Q. Maybe my question wasn't clear. I -- I was  
23 -- I was thinking that the AWRM regulations themselves  
24 might have created a basis for your office to  
25 administer water rights; is that incorrect?

1           A.     Well, we don't have district-specific AWRM  
2 regulations, and the tools I really use for  
3 administration go from the -- you know, the  
4 constitution, the statutes, and our regulations, non,  
5 you know, groundwater and surface water regulations  
6 and Stream System 101. So those were the ones --  
7 that's what I use on a day-to-day basis for  
8 administration.

9           **Q.     Okay. So give me an example of how you use**  
10 **the constitution on a day-to-day basis.**

11          A.     Well, that's -- that's just the over arching  
12 reason we're here essentially. It's just we have to  
13 keep that in mind. We have the authority to  
14 administer water rights and so it's not something I  
15 just look at every day and say, oh, okay,  
16 constitution, but the point is the stated engineer has  
17 the authority to protect the water of the -- the state  
18 and specifically in the lower Rio Grande.

19          **Q.     I understand the state engineer has**  
20 **authority. His office is in Santa Fe. I'm curious**  
21 **how often Mr. D'Antonio himself is involved in**  
22 **administrative decisions about water rights in the**  
23 **lower Rio Grande.**

24          A.     Well, he's designated me as one of the  
25 administrators down here, and with that in mind, he's

1 given me the responsibility to administer water rights  
2 and apparently put his faith in me to do that and so  
3 that's my job as his agent to administer water rights.

4 Q. So in your answer of one question ago, you  
5 said but the point is the state engineer has the  
6 authority to protect water of the state and  
7 specifically in the lower Rio Grande. What your --  
8 your testimony would be perhaps that you have the  
9 authority because it was delegated to you by the state  
10 engineer to protect water of the state and  
11 specifically the lower Rio Grande; is that right?

12 MR. WECHSLER: Object to form.

13 A. That's right.

14 Q. (BY MS. KLAHN) Do you understand your duties  
15 to extend to protecting water in the lower Rio Grande  
16 to ensure waters delivered to Texas under the Compact?

17 A. I wouldn't characterize it that way. I would  
18 say specifically my authority is to do evaluations  
19 when an application is filed for impairment, and to  
20 ensure no new depletions occurred on the river. So  
21 that's -- that's the authority I've been given.

22 Q. How does that answer my question?

23 A. I think it does. I -- I don't know what you  
24 mean.

25 Q. Well, I asked if your duties extended to



1 protecting water in the lower Rio Grande to ensure  
2 that water is delivered to Texas under the Compact,  
3 and you said -- your answer to me was you do an  
4 evaluation when an application is filed for impairment  
5 and to ensure no new depletions occurred on the river.  
6 And I just want you to connect the dots for me. How  
7 is that ensuring delivery of Texas' water under the  
8 Compact?

9 A. Well, since I'm not specifically involved  
10 with the Compact, I can't speak to that, but my job  
11 and our job in the District 4 is to make sure that  
12 anyone who wants to change an element of their water  
13 right doesn't cause depletions to surface water flows,  
14 so that -- that's the only thing I have the authority  
15 to do in my position.

16 Q. So if Texas was already not getting all of  
17 its water and you were looking at no more impairment  
18 based on a water rights application, would you agree  
19 that's not going to change whatever the underlying  
20 problem is related to Texas getting its water?

21 MR. WECHSLER: Object to form. Also  
22 outside the scope.

23 A. I don't really agree with the premise of your  
24 question, so can you re-ask it?

25 Q. (BY MS. KLAHN) What don't you agree with?

1           A.     Well, I can't speak to not going to change  
2 whatever the underlying problem is. That's not within  
3 my wheelhouse. My job is to make sure that any  
4 application that's filed in our office does not cause  
5 local depletions to other wells of other ownerships or  
6 do depletions to the surface water flows.

7           **Q.     In your discussions with Mr. Leininger, you**  
8 **referred several times to keeping the river whole.**  
9 **Can you define for me what it means to keep the river**  
10 **whole?**

11          A.     Sure. Again, when a water right owner comes  
12 in and wants to change an element of their water  
13 right, for instance, change location of wells for  
14 replacement wells or change purpose or place of use,  
15 my job is to be sure that no new depletions occurred  
16 to the river and so that's what I mean keeping the  
17 river whole, no new depletions.

18          **Q.     But what's the starting point for the whole?**  
19 **In other words, would it have been 2005 or whatever**  
20 **whenever you started your job, that's the standard**  
21 **that you're trying to keep the river to or what's the**  
22 **-- what's the temporal piece of keeping the river**  
23 **whole in your view?**

24          A.     Well, what we look at is no new depletions  
25 beyond what has occurred historically, and we use our

1 tools such as Glover-Balmer software and modeling  
2 software to be sure that the impacts to the river  
3 don't exceed what has occurred historically.

4 Q. But, I mean, I understand the Glover-Balmer's  
5 equation. I -- I get that, but you are making that  
6 comparison with current existing conditions on the  
7 river, right? You're not going back to 1980 to make  
8 sure that there's not been any changes since 1980,  
9 correct?

10 A. Well, if there's a water right, the -- that  
11 began exercised in 1956, for instance, we look at a  
12 hundred-year modeling, the effects to the river on  
13 that -- on the river due to pumping from 1956, and so  
14 that's our modeling, and so what we look at is that if  
15 another well -- a replacement well is drilled, we make  
16 sure that the depletions to the river due to the  
17 replacement well don't exceed what has occurred  
18 historically from 1956.

19 Q. But when you do that, you aren't in a  
20 position to say this is the status quo of the river  
21 that we're trying to maintain ; it's not some  
22 objective historical condition, it's just comparing  
23 what that 1956 water right was doing against what the  
24 water right owner wants to do with the replacement  
25 well, for example, correct?

1 tools such as Glover-Balmer software and modeling  
2 software to be sure that the impacts to the river  
3 don't exceed what has occurred historically.

4 Q. But, I mean, I understand the Glover-Balmer's  
5 equation. I -- I get that, but you are making that  
6 comparison with current existing conditions on the  
7 river, right? You're not going back to 1980 to make  
8 sure that there's not been any changes since 1980,  
9 correct?

10 A. Well, if there's a water right, the -- that  
11 began exercised in 1956, for instance, we look at a  
12 hundred-year modeling, the effects to the river on  
13 that -- on the river due to pumping from 1956, and so  
14 that's our modeling, and so what we look at is that if  
15 another well -- a replacement well is drilled, we make  
16 sure that the depletions to the river due to the  
17 replacement well don't exceed what has occurred  
18 historically from 1956.

19 Q. But when you do that, you aren't in a  
20 position to say this is the status quo of the river  
21 that we're trying to maintain ; it's not some  
22 objective historical condition, it's just comparing  
23 what that 1956 water right was doing against what the  
24 water right owner wants to do with the replacement  
25 well, for example, correct?

1           A.     That's right, yes.

2           **Q.     You used the term nuclear option with regard**  
3 **to curtailment. Why is curtailment a nuclear option?**

4           A.     No. I would say priority administration.  
5 Curtailment isn't a nuclear option. And I guess the  
6 question, too, is what do you mean by curtailment in  
7 your eyes.

8           **Q.     Shutting down a water right period.**

9           A.     Okay.

10          **Q.     Lock the well, lock the head gate, don't let**  
11 **them take water. That's curtailment.**

12          A.     Okay.

13          **Q.     How do you define it?**

14          A.     I would agree. And when I say nuclear  
15 option, I mean priority administrations where we make  
16 a call on the river and shut a whole bunch of water  
17 rights down. Yes, the state engineer has that  
18 authority, but we would prefer to use the active water  
19 resource management tools so we don't have to do that.

20          **Q.     So in your view, in your job, active water**  
21 **resource management provides you tools so you can**  
22 **avoid operating under strict priority system?**

23          A.     Well, I think it's to encourage shortage  
24 sharing and cooperation with the farmers and just  
25 managing the river so that -- excuse me -- managing

1 groundwater diversions so that the farmers don't  
2 exceed their water rights as it is on file.

3 **Q. So what do you mean by shortage sharing?**

4 **A. I think that's where our same ownership**  
5 **management comes in to where two farmers can**  
6 **essentially put two farms under one ownership**  
7 **management and where one farmer cannot necessarily**  
8 **irrigate their field, and instead, the other farmer**  
9 **used that water on his lands. So that gives us the**  
10 **tools to do that.**

11 **Q. So in that example, one farmer is not**  
12 **irrigating, and the other farmer is using more water**  
13 **than he's entitled to, correct?**

14 **A. No, that's not right.**

15 **Q. Well, I don't understand where the shortage**  
16 **comes in then?**

17 **A. Well, the farmer isn't using more than he's**  
18 **entitled to. It's all within the same water rights as**  
19 **in the two water rights, the mass balance is**  
20 **maintained.**

21 **Q. Using more -- the farmer that's using**  
22 **additional water is using more water than he would be**  
23 **able to if his neighbor hadn't agreed to loan him his**  
24 **water, correct?**

25 **A. That's true.**

1 Q. And this is the only water district in New  
2 Mexico that has an owner management program; isn't  
3 that right?

4 A. I'm not sure about other districts. I can't  
5 speak to that.

6 Q. When -- when you were deposed last spring,  
7 you told me you didn't have any involvement with the  
8 owner management program. Is that still true?

9 A. I don't administer it on a day-to-day basis.  
10 I do -- I do know how it works, but I don't do the  
11 paperwork and I'm not actively involved with it.

12 Q. Are you involved with the year-end evaluation  
13 of whether anybody exceeded the mass balance as you  
14 call it under an owner management program?

15 A. I'm not. Other than I hear Ryan Serrano give  
16 a summary and overview, but that's -- he -- he  
17 administers that.

18 Q. So how was the ownership management program  
19 shortage sharing again? I don't really feel like I  
20 had an answer to that question.

21 A. Well, I have to back off on that. It may not  
22 be shortage sharing.

23 Q. So can you give me an example of what you  
24 mean by shortage sharing?

25 A. Not right now, no.

1 Q. So you, as the State of New Mexico, cannot  
2 give me an example of shortage sharing? I just want  
3 to make sure that's clear on the record. Is that  
4 right?

5 A. Let me think about this a bit. I'm sure I  
6 can think of something later, but I can't think of  
7 anything right at the moment. I apologize.

8 Q. Okay. Were you in your current professional  
9 position in 2005?

10 A. Yes.

11 Q. Were you involved in the state engineer's  
12 effort to implement lower Rio Grande specific AWRM  
13 regulations?

14 A. Yes.

15 MS. KLAHN: Kayla, could you pull up a  
16 deposition exhibit for me? It -- it says well  
17 metering requirements on the first page.

18 THE VIDEOGRAPHER: Okay. Give me a  
19 moment.

20 Q. (BY MS. KLAHN) While we're waiting for that  
21 to come up, Ms. Thacker, did Mr. D'Antonio or anyone  
22 else at the Office of the State Engineer ever give you  
23 any instructions or guidance about the role of the  
24 Compact in your professional duties?

25 A. No.



1 Q. Would that be true in -- because I believe  
2 you had two positions with the Office of the State  
3 Engineer; is that right?

4 A. Actually, I've had three.

5 Q. Have you ever had any instruction or guidance  
6 on how the Compact plays into your duties?

7 A. No.

8 Q. Thank you.

9 (Exhibit No. 1 was marked.)

10 Q. (BY MS. KLAHN) Okay. So the way this works  
11 is you should have control of the document that you  
12 should be able to see in front of you. Can you see  
13 it?

14 A. I can.

15 Q. Okay. And this is a document we got from the  
16 State of New Mexico somehow or the other in the  
17 context of this litigation, and it starts with New  
18 Mexico Bates No. 00210791, and it's a collection of  
19 documents related to, I believe, the AWRM effort in  
20 the lower Rio Grande. The first page is well metering  
21 requirements, but I would like you to page down  
22 through this to what should be PDF Page 17. And maybe  
23 you can flip it so that it's the right way. Perfect.  
24 Okay. So the title of this is, "Objectives for Lower  
25 Rio Grande District-Specific Regulations for

1 Implementation of Active Water Resources Management in  
2 the Lower Rio Grande Water Master District." I'd ask  
3 you to take a look at these objectives, A through M.

4 A. Okay.

5 Q. And I'd like to draw your attention to the  
6 first bullet point up there, Bullet Point A, "Protect  
7 senior water rights from impairment through  
8 administration of both surface and groundwater rights  
9 within the Lower Rio Grande Water Master District by  
10 priority administration or other methods as provided  
11 by the AWRM regulations." Do you see that?

12 A. I do.

13 Q. So this is -- this was apparently an  
14 objective for implementation of Lower Rio Grande  
15 specific AWRM rules. Is this an objective of your  
16 office in the absence of Lower Rio Grande specific  
17 regulations?

18 MR. WECHSLER: Object to form.

19 Q. (BY MS. KLAHN) You can answer.

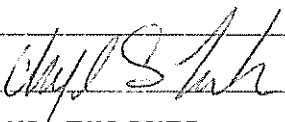
20 A. Well, I think the state engineer obviously  
21 has the authority to administer based on priority  
22 administration, but we haven't had to do that since  
23 I've been here.

24 Q. Remind me what it would take for there to be  
25 priority administration in your estimation.

## WITNESS CORRECTIONS AND SIGNATURE

Please indicate changes on this sheet of paper,  
giving the change, page number, line number and reason  
for the change. Please sign each page of changes.

PAGE/LINE	CORRECTION	REASON FOR CHANGE
36/24	Wells → meters	Wrong word
36/25	Wells → meter	Wrong word
42/17	is two farms are more →	clarification
	with the two or more farms are managed together	
42/18	pulled → pooled	Wrong word
44/13	rights → right	Wrong word
46/8	determine → determination	
	other than	clarification
46/17	when → what I	clarification
49/42	there's what → that's how	clarification
71/4	non → and	
75/11	began → began to be	clarification
88/10	in → is	Wrong word
88/24	holding → closing	Wrong word
89/42	right and will → right and we will	clarification

  
CHERYL THACKER

## S I G N A T U R E   O F   W I T N E S S

I, CHERYL THACKER, solemnly swear or affirm under the pains and penalties of perjury that the foregoing pages contain a true and correct transcript of the testimony given by me at the time and place stated with the corrections, if any, and the reasons therefor noted on the foregoing correction page(s).

  
\_\_\_\_\_  
CHERYL THACKER

Job No. 65671



1 behalf this deposition is taken, nor in the regular  
2 employ of this attorney; and I certify that I am not  
3 interested in the cause, nor of kin or counsel to  
4 either of the parties.  
5

6 That the amount of time used by each party at  
7 the deposition is as follows:

8 MS. KLAHN - 00:39:49

MR. WECHSLER - 00:00:00

9 MR. LEININGER - 01:46:47

MR. WALLACE - 00:00:00

10 MR. HICKS - 00:17:46

MS. BARNCASTLE - 00:02:45

11  
12 GIVEN UNDER MY HAND AND SEAL OF OFFICE, on  
this, the 8th day of October, 2020.



13  
14 Heather L. Garza  
15 HEATHER L. GARZA, CSR, RPR, CRR  
16 Certification No.: 8262  
17 Expiration Date: 04-30-22

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IN THE SUPREME COURT OF THE UNITED STATES  
BEFORE THE OFFICE OF THE SPECIAL MASTER  
HON. MICHAEL J. MELLO

STATE OF TEXAS	)	
	)	
Plaintiff,	)	
	)	Original Action Case
VS.	)	No. 220141
	)	(Original 141)
STATE OF NEW MEXICO,	)	
and STATE OF COLORADO,	)	
	)	
Defendants.	)	

\*\*\*\*\*

REMOTE ORAL AND VIDEOTAPED DEPOSITION OF  
JOHN D'ANTONIO  
JUNE 24, 2020  
VOLUME 1

\*\*\*\*\*

REMOTE ORAL AND VIDEOTAPED DEPOSITION of JOHN D'ANTONIO, produced as a witness at the instance of the Plaintiff State of Texas, and duly sworn, was taken in the above-styled and numbered cause on June 24, 2020, from 9:03 a.m. to 12:51 p.m., before Heather L. Garza, CSR, RPR, in and for the State of Texas, recorded by machine shorthand, at the offices of HEATHER L. GARZA, CSR, RPR, The Woodlands, Texas, pursuant to the Federal Rules of Civil Procedure and the provisions stated on the record or attached hereto; that the deposition shall be read and signed.

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VIDEOGRAPHER:

Ms. Kayla Brown

1 ALSO PRESENT:

2 Shelly Dalrymple

Peggy Barroll

3 Arianne Singer

Al Blair

4 Gary Esslinger

Susan Barela

5 Ian Ferguson

Michelle Estrada-Lopez

6 Greg Ridgley

Jeff Clark

7 Jonathan George

Erek Fuchs

8 Kyler Rayden

Rolf Schmidt-Petersen

9 Estevan Lopez

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## EXAMINATION INDEX

WITNESS: JOHN D'ANTONIO

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## EXHIBIT INDEX

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Bio of John D'Antonio Jr. P.E., Deputy  
District Engineer Albuquerque District  
U.S. Army Corps of Engineers

EXHIBIT NO.2	71
Rio Grande Compact	

1 THE VIDEOGRAPHER: The time is 9:03 a.m.  
2 We're on the record.

3 (The witness was sworn.)

4 MR. SOMACH: I guess we should start  
5 with some appearances. This is Stuart Somach. I'm  
6 the attorney for the State of Texas. On the phone or  
7 on the Zoom, I guess, is Rich Deitchman, Theresa  
8 Barfield, Mac Goldsberry from my office, also  
9 appearing on behalf of the State of Texas. I'm not  
10 sure if anybody else is on the phone. There is -- I  
11 have a list, but I can't entirely scroll through it  
12 right now so if anybody else for Texas is on the  
13 phone, just make your appearance.

14 (No response.)

15 MR. SOMACH: Then Jeff, for New Mexico?

16 MR. WECHSLER: Good morning. Jeff  
17 Wechsler for the State of New Mexico, and we also have  
18 or will have throughout the day John Draper, Greg  
19 Ridgley, Arianne Singer, Shelly Dalrymple, Susan  
20 Barela, Rolf Schmidt-Petersen, Peggy Barroll, and  
21 Estevan Lopez.

22 MR. SOMACH: And for the United States?

23 MR. LEININGER: Good morning. This is  
24 Lee Leininger for the United States, and we're joined  
25 with Jim Dubois from Department of Justice, Chris Rich

1 and Shelly Randel from the solicitor's office, Ian  
2 Ferguson, Michelle Estrada-Lopez, Bureau of  
3 Reclamation.

4 **MR. SOMACH:** And for the State of  
5 Colorado?

6 **MR. WALLACE:** Good morning. This is  
7 Chad Wallace, along with Preston Hartman, for the  
8 State of Colorado.

9 **MR. SOMACH:** And EP No. 1.

10 **MR. HICKS:** Renea Hicks for El Paso  
11 County Water Improvement District No. 1, and also on  
12 the Zoom, I believe, is Dr. Al Blair.

13 **MR. SOMACH:** Anybody on behalf of the  
14 Elephant Butte Irrigation District?

15 **MR. ESSLINGER:** Gary Esslinger.

16 **MR. SOMACH:** Okay.

17 **MR. FUCHS:** Erek Fuchs.

18 **MR. SOMACH:** Okay. What about -- I'll  
19 just go down through the service list here if I could.  
20 What about for Albuquerque?

21 **MR. BROCKMANN:** Yes, Stuart, this is Jim  
22 Brockmann on behalf of Albuquerque. I'll also sit in  
23 for Jay for the City of Las Cruces.

24 **MR. SOMACH:** Okay. City of El Paso?

25 **MR. CAROOM:** Good morning. Doug Caroom

1 for the City of El Paso.

2 **MR. SOMACH:** Hudspeth County  
3 Conservation Reclamation District?

4 (No response.)

5 **MR. SOMACH:** New Mexico pecan growers?

6 (No response.)

7 **MR. SOMACH :** New Mexico State?

8 **MR. UTTON:** Good morning. This is John  
9 Utton.

10 **MR. SOMACH:** Anybody else? Okay. Now,  
11 Jeff, my -- is someone else -- want to say something?

12 **MR. GEORGE:** Good morning. This is  
13 Jonathan George on behalf of Texas. I was -- I missed  
14 my cue to speak.

15 **MR. SOMACH:** Okay. Who else? Anybody  
16 else?

17 (No response.)

18 **MR. SOMACH:** Okay. Jeff, my  
19 understanding is we'll go to -- I'm trying to think  
20 when my time -- 1:00 your time, and if necessary,  
21 we'll -- we'll move into tomorrow, and we have Friday,  
22 and heaven forbid that we need another half day, but I  
23 do appreciate your accommodating me. I did have a  
24 conflict arise yesterday and because it was a family  
25 conflict as opposed to a business conflict, I put the

1 priority there, so I appreciate your accommodation.

2 JOHN D'ANTONIO,  
3 having been first duly sworn, testified as follows:

4 E X A M I N A T I O N

5 BY MR. SOMACH:

6 Q. Mr. D'Antonio, you've been sworn in, and I  
7 know that you've had your deposition taken before; is  
8 that correct?

9 A. That's correct.

10 Q. A few times?

11 A. A couple of times as far as I can remember,  
12 yes.

13 Q. Have you ever -- you've never done one of  
14 these remote depositions, have you?

15 A. I have not.

16 Q. Okay. I -- I don't know if they're easier or  
17 harder, to be honest with you. This is the first one  
18 I've taken so we'll experience this together. Jeff's  
19 an old hand at it, so he can help us out where we --  
20 we run into problems. But in general, this is just  
21 like any other deposition, so I want to make certain  
22 that you understand that you're under oath and that by  
23 agreement of the parties and involvement of the  
24 Special Master, an oath is the same as if we were in  
25 the same room taking an in-person deposition. Do you



1 in a fully-appropriated system, is going to have to  
2 come from somewhere, and so we -- we allow for changes  
3 in placement purpose of use that only allow the  
4 consumptive use portion of a water right to be  
5 transferred from a move-from location to a move-to  
6 location so that we don't introduce any additional  
7 depletions within our systems.

8 Q. Let me -- let me focus on the word depletion.  
9 Are you using the word depletion in a technical sense  
10 or does it carry a ordinary dictionary definition?  
11 How would you define depletions as you've been using  
12 it?

13 A. Well, depletion would be taking away from  
14 a -- a certain supply, so a depletion would mean a  
15 loss to a system, in this case, a loss of water to a  
16 system. If you're -- if you're only transferring the  
17 consumptive use portion of a water right and you still  
18 have the return flow component that stays within the  
19 system, so if you're -- if you're doing that  
20 correctly, you're not introducing any depletions to  
21 that particular system because you're keeping the  
22 consumptive use the same.

23 Q. And -- and is there some temporal nature  
24 of -- of -- of what you just articulated? In other  
25 words, you're talking about ensuring that if there is

1 a transfer, for example, you only transfer consumptive  
2 use, what would otherwise be return flows would --  
3 would remain in the system, but is that measured from  
4 a time perspective, given the fact that each year is  
5 different, including perhaps even cropping changes?

6 MR. WECHSLER: Objection; compound  
7 question.

8 Q. (BY MR. SOMACH) Did -- did you understand the  
9 question or would you like me to rephrase it?

10 A. Well, yeah, could you rephrase it, please?

11 Q. When you -- when you refer to the role of the  
12 state engineer in part is to -- to prevent depletions,  
13 it's depletions against some kind of a baseline, isn't  
14 it? It's not an abstract concept, is it?

15 A. Well, I mean, the baseline is the existing --  
16 is the existing system and what's being used. I'm  
17 still not sure I understand the -- the question this  
18 you're asking.

19 Q. Well, you -- you said the existing system.  
20 I'm just trying to understand actually what you're  
21 saying. So the state engineer wants to ensure that  
22 the existing system status quo is maintained. I -- I  
23 assume that that's what you're saying, but I don't --  
24 I'm not saying that. I'm asking you if that's what  
25 you said.

1       A.     Well, let me -- I guess, let me be a little  
2     more clear on my answer, I think. My job is to  
3     protect the existing water right owners within a  
4     particular system. So if you're protecting those  
5     owners through -- through eliminating depletions to  
6     that particular system, that's what my -- that's one  
7     of my main jobs, I think, through our water  
8     administration efforts through our district offices  
9     around the State of New Mexico.

10       **Q.     I think you said earlier that -- do you**  
11     **consider in an interstate stream a downstream state to**  
12     **be part of what you're protecting from these**  
13     **depletions?**

14       A.     Well, I think ancillary, they obviously  
15     derive benefits from that. I'm focused on the New  
16     Mexico water users and -- and the protection of  
17     impairment with respect to the bigger picture.  
18     Obviously, you know, the -- the -- the Compact on the  
19     Rio Grande is -- is really the overarching -- is the  
20     overarching piece in which there's other pieces the  
21     Rio Grande project underneath that, but that gets  
22     into -- that gets into the -- the aspect of the  
23     Compact. What I'm talking about right now is water  
24     rights administration and control and depletions  
25     throughout the State of New Mexico, which included the

1 lower Rio Grande.

2 Q. Okay. I want to come back to that, but I  
3 don't want to belabor it now because I'm still trying  
4 to make sure I understand the role of the Special  
5 Master. Does -- not the Special Master, the Office of  
6 State Engineer. I'm not sure I elevated or demoted  
7 you there. I don't know which way it goes. Does the  
8 state engineer make policy, water policy, for the  
9 state?

10 A. I think through the enforcement of our rules  
11 and regulations and following the mandates by the  
12 state legislature, we have -- we have a job to do to  
13 make sure we comply with those mandates. We can get  
14 involved in policy through -- and I think that's  
15 through and more of a function of the Interstate  
16 Stream Commission, which is a program under the state  
17 engineer's office through its water planning efforts,  
18 but from my perspective, the state engineer is really  
19 in a -- in a regulatory -- a regulatory role with  
20 respect to the duties of administering water.

21 Q. Would it be fair to say that you implement  
22 water policy that has been developed by other entities  
23 within the state?

24 A. Yes.

25 Q. And I assume that means the governor's

1 **office; is that correct?**

2 A. Well, yeah, there's direction, obviously,  
3 from the governor's office, and if that policy -- that  
4 policy is consistent, but -- but it's got to be done  
5 under the -- under the boundary conditions of rules  
6 and regulations and technical analysis in order to  
7 implement policy so, you know, there are some gray  
8 areas, but -- but generally, you know, the policy --  
9 policy piece can come down, but you, as the  
10 administrator of -- of water rights, you have to be  
11 able to figure out how to do it within -- within the  
12 law and within the technical analysis on impairment  
13 and other issues associated with public welfare and  
14 whether or not it's contrary to conservation.

15 **Q. Let's -- let me ask you a question about and**  
16 **you mentioned a couple times here. The Interstate**  
17 **Stream Commission. What is the Interstate Stream**  
18 **Commission?**

19 A. Well, the Interstate Stream Commission is  
20 a -- is a program, as I said, for budgeting purposes,  
21 under the state engineer's office. Obviously, we  
22 talked earlier that state engineer's position as  
23 secretary of the Interstate Stream Commission.  
24 There's commissioners that are appointed in that  
25 regard to help carry out policy -- policy regarding

1     **we'll be back.**

2           A.     Okay.

3                   **MR. SOMACH:**   All right.

4                   THE VIDEOGRAPHER:   The time is 10:18  
5     a.m.   We're off the record.

6                               (Break.)

7                   THE VIDEOGRAPHER:   The time is 10:30  
8     a.m.   We're on the record.

9           **Q.     (BY MR. SOMACH)   Mr. D'Antonio, we were**  
10   **talking about the various entities and agencies**  
11   **involved with water administration and in particular**  
12   **on the Rio Grande for the State of New Mexico.**  
13   **What -- what is the role of the attorney general's**  
14   **office with respect to the activities of the Office of**  
15   **the State -- the Office of State Engineer, if any?**

16           A.     Well, they -- they deputize some of our --  
17   you know, they're -- they get involved in interstate  
18   litigation and so they're the -- they're the state  
19   engineer's attorney, essentially, on -- on interstate  
20   litigation.   So that's -- their role is to defend the  
21   State of New Mexico.

22           **Q.     And is it -- do they independently represent**  
23   **or defend the Interstate Stream Commission in a**  
24   **similar manner or is it some -- somehow different?**

25           A.     To my knowledge, it's -- they defend them

1 based on any time there is interstate litigation.  
2 That's the extent of my knowledge on the AG's  
3 involvement.

4 **Q. And the Compact-related issues, if there's no**  
5 **litigation, are -- is the attorney general's office**  
6 **involved?**

7 A. I would say typically not, but they from time  
8 to time get involved in -- in promulgating legislation  
9 or -- not promulgating, but passing legislation. But  
10 typically not if it's not interstate related. There's  
11 not really a need for their involvement.

12 **Q. In -- in -- from a policy perspective in**  
13 **litigation, and here I'm not asking, you know, for who**  
14 **makes decisions on legal issues, but rather to the**  
15 **extent that there are policy issues associated with**  
16 **litigation involving interstate streams, who provides**  
17 **that policy direction?**

18 A. You might have to rephrase that. I'm not  
19 sure that that -- I would say there's information  
20 associated that we provide, but information data is  
21 different than policy, so I'm not sure what your  
22 question is.

23 **Q. Well, it goes to decision making. The**  
24 **traditional attorney/client relationship, it -- you**  
25 **know, the client directs the attorneys with respect to**

1 the position of the client in the litigation. Is it  
2 the same with respect to Compact litigation in New  
3 Mexico?

4 MR. WECHSLER: I object as to the extent  
5 it calls for a legal conclusion.

6 Q. (BY MR. SOMACH) I'm not looking -- again, in  
7 fact, I'm not looking for any legal conclusions over  
8 the next three days, so you can put that out of your  
9 mind. But I am trying to get the state engineer's  
10 understanding with respect to that relationship.

11 A. So the state engineer Interstate Stream  
12 Commission provide technical information data or  
13 consideration on whatever the lawsuit might be,  
14 whatever issue may come up. I'm not sure that your  
15 question on policy has to do with our involvement when  
16 we're trying to push a policy. We're -- we're  
17 technical people. We have modeling. We have rules  
18 and regulations. We have statutes, and we -- we try  
19 to comply with those, and if there's a disagreement,  
20 it's on a factual basis, not policy.

21 Q. I'll come back to that, but for now, I'm  
22 going to move forward here. As the state engineer,  
23 the secretary of the Interstate Stream Commission, and  
24 commissioner of -- for the Rio Grande Compact, who  
25 would you say in the State of New Mexico is the person



1 that has the most knowledge about New Mexico's  
2 obligations under the Rio Grande Compact?

3 A. I would say probably two -- two people,  
4 former ISC director Estevan Lopez, and I would say our  
5 existing interstate stream director, Rolf  
6 Schmidt-Petersen, if I had to name two.

7 Q. What about you?

8 A. Well, I was gone for eight years --  
9 seven-and-a-half years in my role with the U.S. Army  
10 Corps of Engineers, so I missed a period of time there  
11 so I would put those two experience and continuity a  
12 little bit ahead of mine with respect to being experts  
13 on the Compact.

14 Q. And that includes New Mexico's obligations  
15 under the contract -- Compact?

16 A. Yes.

17 Q. And, again, I'm not looking for any legal  
18 issues or -- or questions here, but who within the  
19 State of New Mexico would you say from a -- let's call  
20 it a policy or factual perspective, is the person most  
21 knowledgeable within the State of New Mexico about  
22 the -- the Texas complaint against -- against New  
23 Mexico?

24 A. I use the same -- the same two names with  
25 respect to the policy, Mr. Lopez and Mr. Rolf

1 Schmidt-Petersen.

2 Q. Who in the State of New Mexico, again from a  
3 factual policy perspective, not a legal perspective,  
4 would you say is the most knowledgeable within the  
5 State of New Mexico with respect to the United States  
6 complaint in intervention?

7 A. Probably the same two folks. I can't think  
8 of another one. And I'm leaving Peggy Barroll out  
9 because she's more of the technical person, but I  
10 think she fully understands all of the issues that are  
11 down there so, you know, those are the -- the folks  
12 that are intimately familiar with all those issues.

13 Q. Do you know whether or not if -- let's stick  
14 right now with Estevan Lopez. Do you know whether or  
15 not Estevan Lopez was involved in the development of  
16 New Mexico's answer to the New Mexico -- of the Texas  
17 complaint in this case?

18 A. No, I do not.

19 Q. Do you know whether he was involved with  
20 respect to the New Mexico's development of answers to  
21 the -- to the United States' complaint in  
22 intervention?

23 A. No.

24 Q. And I -- no, you don't know?

25 A. No, I don't know.

1           Q.    Okay.  What about Rolf Schmidt-Petersen, do  
2   you know whether he was involved in the development of  
3   the answer to the Texas complaint, the New Mexico  
4   answer to the Texas complaint?

5           A.    I think he -- well, I know that he was an  
6   advisor, but I don't know the extent of it.

7           Q.    And the same question with respect to the  
8   United States complaint in intervention, was  
9   Mr. Petersen involved, to your knowledge, in the  
10  development of the factual responses to the  
11  allegations in the United States' complaint?

12          A.    Yes.

13          Q.    What about Peggy Barroll?  Now, you said that  
14  you were leaving her out, but to the extent that there  
15  are factual components to the answer in the -- to New  
16  Mexico's answer to the Texas complaint, do you know  
17  whether Peggy Barroll was involved in -- in -- in  
18  those?

19          A.    No.  You know, they're -- they're both expert  
20  witnesses, and I have seen their reports, but their  
21  individual involvement, I was sort of separated from  
22  how and when any of them were involved with -- with  
23  the complaint.

24          Q.    Do you know -- were you involved in the  
25  development of the New Mexico counterclaims against

1 Texas and United States?

2 A. No.

3 Q. Do you know whether or not Mr. Lopez was  
4 involved in the development of counterclaims against  
5 Texas and the United States?

6 A. No.

7 Q. Do you know whether or not Ms. Barroll was  
8 involved with respect to the development of the  
9 factual contentions in the counterclaims brought by  
10 New Mexico?

11 A. No.

12 Q. If I -- are Mr. Lopez, Mr. Petersen, and I'm  
13 going to throw Ms. Barroll collectively, the persons  
14 most knowledgeable about the New Mexico positions with  
15 respect to the counterclaims brought against Texas and  
16 the United States.

17 A. Was that a question? I didn't get to --

18 Q. I thought I started with "are" so let me put  
19 an are at the beginning.

20 A. Okay.

21 Q. Go ahead.

22 A. Can you repeat it?

23 Q. Sure. Are Mr. Lopez, Mr. Petersen, and  
24 Ms. Barroll collectively the persons most  
25 knowledgeable about New Mexico's positions with

1                   WITNESS CORRECTIONS AND SIGNATURE

2                   Please indicate changes on this sheet of paper,  
3                   giving the change, page number, line number and reason  
4                   for the change. Please sign each page of changes.


PAGE/LINE	CORRECTION	REASON FOR CHANGE
14/ 24	change "Hydrology" to "Hydraulic"	Correction
15/ 3 & 13	change "Hydrology" to "Hydraulic"	Correction
15/ 10	change "Core" to "Corps"	Correction
18/ 6	change "TRC" to "T or C"	Correction
22/ 3	change "for immediately" to "when"	Correction
22/ 16	change "2006" to "2003"	Correction
23/ 19	delete " 's office"	Correction
23/ 20	change "buyer" to "hire"	Correction
27/ 22	change "2011" to "2003"	Correction
28/ 24	change "order of" to "other"	Correction
29/ 4	change "Indian - There's a Tribal Person" to "New Mexico Indian Affairs Representative"	Correction
29/ 12	change "governor's got a" to "Governor appointed a drought"	
30/ 11	change "on" to "I'm"	Correction
34/ 34	change "placement" to "place and purpose"	Correction
46/ 14	change "allocations" to "applications"	Correction
48/ 1	change "Playa" to "Plata"	Correction
49/ 11	change "on" to "by"	Correction

23                     
24                   JOHN D'ANTONIO, VOLUME I

## WITNESS CORRECTIONS AND SIGNATURE

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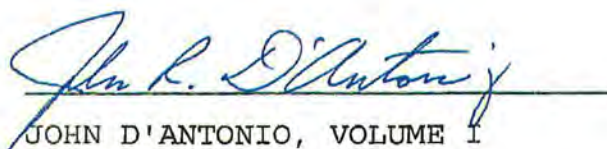
PAGE/LINE	CORRECTION	REASON FOR CHANGE
51/ 15	change "there being" to "they're"	Correction
52/ 7	add "the" after "within"	Correction
64/ 14	change "Petersen" to "Lopez"	Correction
89/ 5	change "can" to "can't"	Correction
101/ 13	change "those" to "low"	Correction
108/ 19	change "ratifications" to "ramifications"	Correction

  
JOHN D'ANTONIO, VOLUME I



## S I G N A T U R E   O F   W I T N E S S

I, JOHN D'ANTONIO, solemnly swear or affirm under the pains and penalties of perjury that the foregoing pages contain a true and correct transcript of the testimony given by me at the time and place stated with the corrections, if any, and the reasons therefor noted on the foregoing correction page(s).



JOHN D'ANTONIO, VOLUME I

Job No. 63558

IN THE SUPREME COURT OF THE UNITED STATES  
 BEFORE THE OFFICE OF THE SPECIAL MASTER  
 HON. MICHAEL J. MELLOY

STATE OF TEXAS	)	
	)	
Plaintiff,	)	
	)	Original Action Case
VS.	)	No. 220141
	)	(Original 141)
STATE OF NEW MEXICO,	)	
and STATE OF COLORADO,	)	
	)	
Defendants.	)	

THE STATE OF TEXAS :  
 COUNTY OF HARRIS :

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 above and foregoing answers of the witness, JOHN D'ANTONIO, to the interrogatories as indicated were made before me by the said witness after being first remotely duly sworn to testify the truth, and same were reduced to typewriting under my direction; that the above and foregoing deposition as set forth in typewriting is a full, true, and correct transcript of the proceedings had at the time of taking of said deposition.

I further certify that I am not, in any capacity, a regular employee of the party in whose



1 behalf this deposition is taken, nor in the regular  
2 employ of this attorney; and I certify that I am not  
3 interested in the cause, nor of kin or counsel to  
4 either of the parties.

5  
6 That the amount of time used by each party at  
7 the deposition is as follows:

8 MR. SOMACH - 03:11:39

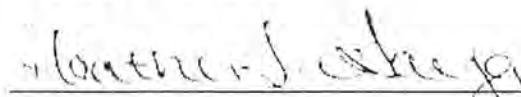
MR. WECHSLER - 00:00:00

9 MR. LEININGER - 00:00:00

MR. WALLACE - 00:00:00

10 MR. HICKS - 00:00:00

11  
12 GIVEN UNDER MY HAND AND SEAL OF OFFICE,  
13 this, the 21st day of July, 2020.

14 

HEATHER L. GARZA, CSR, RPR, CRR

15 Certification No.: 8262

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IN THE SUPREME COURT OF THE UNITED STATES  
BEFORE THE OFFICE OF THE SPECIAL MASTER  
HON. MICHAEL J. MELLOY

STATE OF TEXAS	)	
	)	
Plaintiff,	)	
	)	Original Action Case
VS.	)	No. 220141
	)	(Original 141)
STATE OF NEW MEXICO,	)	
and STATE OF COLORADO,	)	
	)	
Defendants.	)	

\*\*\*\*\*  
ORAL AND VIDEOTAPED DEPOSITION OF  
PEGGY BARROLL  
FEBRUARY 6, 2020  
VOLUME 2  
\*\*\*\*\*

ORAL AND VIDEOTAPED DEPOSITION of PEGGY BARROLL,  
produced as a witness at the instance of the  
Plaintiff, and duly sworn, was taken in the  
above-styled and numbered cause on February 6, 2020,  
from 8:41 a.m. to 3:24 p.m., before Heather L. Garza,  
CSR, RPR, in and for the State of Texas, recorded by  
machine shorthand, at the DRURY PLAZA HOTEL - SANTA  
FE, 828 Paseo De Peralta, Santa Fe, New Mexico,  
pursuant to the Federal Rules of Civil Procedure and  
the provisions stated on the record or attached  
hereto; that the deposition shall be read and signed.

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3 ALSO PRESENT:

4 Mr. Ian Ferguson

5 Mr. Jeff Wechsler

Mr. Estevan Lopez

6 Mr. John Utton

Mr. Gary Esslinger

7 Mr. Phil King

Mr. Al Blair

8 Mr. Gilbert Barth (via telephone)

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14	Project and the Republic of Mexico, 1951	
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16		
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1 THE VIDEOGRAPHER: Today's date is  
2 February 6th, 2020, and we are going on the record.  
3 The time is 8:41 a.m. This begins DVD No. 4 in the  
4 continuation of Dr. Peggy Barroll. The witness has  
5 been sworn in, and you may proceed.

6 PEGGY BARROLL,  
7 having been first duly sworn, testified as follows:

8 E X A M I N A T I O N

9 BY MR. LEININGER:

10 Q. Okay. Good morning, Dr. Barroll. This is --  
11 for the record, this is Lee Leininger. I'm continuing  
12 the questioning this morning. So yesterday, we had  
13 discussed the draft AWRMs, and one question I want to  
14 go back to, it's the first public draft, Exhibit 11.  
15 Do you still have a copy of that in front of you?

16 A. Yes, I do.

17 Q. If you'd turn to Page 14.

18 A. Yes.

19 Q. And see Paragraph AAA --

20 A. Yes.

21 Q. -- called, "Supply administration date." And  
22 it reads, "Supply administration date, colon, a date  
23 to be determined as necessary by the State Engineer  
24 for implementation of supply administration to  
25 temporarily curtail junior water rights in years in



1 is something that I don't know if the State could do  
2 that legally. I think we -- it's -- not -- we -- we  
3 believed that that would be a difficult thing to force  
4 on the Lower Rio Grande, that it would instead be up  
5 to the people in the Lower Rio Grande to decide  
6 whether they wanted their aquifer to be sustainable.

7 Q. Let's go to the next exhibit.

8 (Discussion off the record.)

9 (Exhibit No. 15 was marked.)

10 Q. (BY MR. LEININGER) Dr. Barroll, you've been  
11 handed what's been marked as Exhibit 15. It's  
12 titled, "Rio Grande Project Operating Agreement, A  
13 State of New Mexico Perspective," presented by Peggy  
14 Barroll, PhD, August 5, 2010. Do you recall creating  
15 this?

16 A. Yes.

17 Q. Okay. And essentially, why -- why was this  
18 created, and what -- what is it? It's a PowerPoint  
19 apparently. Why was it created?

20 A. My recollection is I was asked to present at  
21 a -- a CLE, continuing legal education, conference,  
22 and I presented this at that conference.

23 Q. Okay. So you presented it on August 5?

24 A. Yes. I believe so.

25 Q. Okay. So if you -- if you look about halfway

1 through -- sorry, I don't have a page number, but if  
2 you look about halfway through your slides here,  
3 you've got a slide called, "EBID's allocation"?

4 A. Yes.

5 Q. And you've got a line here for 2008/2009. So  
6 you're comparing post operating agreement -- let's  
7 back up for a second.

8 You're taking a perspective on the operating  
9 agreement, and just to be certain, we're talking about  
10 the 2008 Rio Grande project operating agreement; is  
11 that right?

12 A. That's correct.

13 Q. That was operating agreement, which was  
14 entered into between the two irrigation districts and  
15 Bureau of Reclamation?

16 A. Yes. That's my understanding.

17 Q. And that implemented the D3 process that we  
18 talked about?

19 A. The D3 process plus carryover.

20 Q. So, now, on this slide, you have figures  
21 comparing 2008 and 2009 to 2001/2002, correct?

22 A. That's correct.

23 Q. And the reason for this is to show the  
24 decrease in water allocated for EBID diversion?

25 A. That's correct.

1 Q. So in 2009, the allocation for EBID is  
2 346,000 acre-feet?

3 A. That's what I've got in that table, yes.

4 Q. Okay. And to the best of your knowledge, was  
5 2009 a full supply year?

6 A. Yes. I'd regard it as a full supply year.

7 Q. If you go to -- looks like it's  
8 third-to-the-last slide. It's called, "How Are  
9 Groundwater Pumping Effects Accounted?"

10 A. Yes.

11 Q. So this slide has four bullet points. Let's  
12 just read through them. "Currently, EBID's allocation  
13 is reduced for all deviations from the D2 curve, no  
14 matter the source. As a result, New Mexico  
15 groundwater pumping effects are addressed implicitly."  
16 All right. Let me -- let me stop you right there.

17 When you're saying New Mexico groundwater effects  
18 are -- pumping effects are addressed implicitly,  
19 that's in reference to deviations from the D2 curve  
20 and its impacts from groundwater pumping?

21 A. That's right. The deviations from the D2  
22 curve have a number of causes. Part of that cause  
23 would be increases in depletions in New Mexico since  
24 the D2 period, and since the D3 method docks EBID for  
25 all deviations from the D2 curve, this would include

1 deviations caused by increases in depletions in New  
2 Mexico.

3 Q. The next sentence says, "In addition, EBID is  
4 paying for Texas groundwater pumping impacts." Is  
5 that addressed implicitly in D3?

6 A. Yes. Any impacts caused by Texas pumping  
7 that would cause deviations from the D2 curve, those  
8 are also being subtracted from EBID's allocation.

9 Q. All right. And we had a little discussion  
10 yesterday. Do you recall that we were talking about  
11 the amount of pumping in the lower Mesilla within  
12 Texas in the Canutillo well field during the D2  
13 period?

14 A. Yes.

15 Q. So are you referring to Texas groundwater  
16 impacts after the D2 period, after 1978?

17 A. It gets a little mixed, because I think that  
18 the deviation from D2 that is occurring is much larger  
19 than the impacts from increased depletions in New  
20 Mexico since the D2 period. So it seems to me that  
21 the -- I think the intent was to grandfather in the  
22 pumping from the D2 period, but I don't think that  
23 that is what actually has occurred, and since that has  
24 not occurred for New Mexico, I don't know that it  
25 should also work that way for Texas.

1           Q.    So I think you just stated that you think  
2           that there's been this increase in impacts from Texas  
3           groundwater pump -- pumping post 1978. Was that  
4           right?

5           A.    I think there probably has been an increase  
6           since 1978 in Texas pumping impacts.

7           Q.    Okay. And does your expert report list those  
8           increases?

9           A.    I don't think it does.

10          Q.    What's your source of information for your  
11          conclusion that pumping is increased in the Texas  
12          portions of the southern Mesilla?

13          A.    I think there has been an increase in  
14          Canutillo pumping. I think that there may have been  
15          an increase in depletions with -- associated with  
16          changes in cropping. I know that, like, there's  
17          pecans in the southern -- in the Texas part of the  
18          Mesilla now. So the same changes in cropping and  
19          changes in irrigation efficiency that occurred in New  
20          Mexico probably occurred in the Texas part, too.  
21          Unfortunately, we do not have metered data from the  
22          Texas part of the Mesilla, so there's a fair amount of  
23          error bar associated with anything I know about what's  
24          really going on in the Texas/Mesilla. But, again, I'm  
25          also saying that since I don't think that the D2

1 amount of pumping for New Mexico has been  
2 grandfathered into the D2 -- into the D3 method, I do  
3 not think that the D2 level of pumping in the Texas  
4 has -- should -- should be grandfathered into the D3  
5 method either.

6 Q. So you -- you state that part of your source  
7 of information for why you think Texas pumping in the  
8 Mesilla valley has increased is changes in cropping,  
9 changes in irrigation efficiency. Are those studies  
10 that you're familiar with, those recent -- recent  
11 studies by -- by experts or are you just --

12 A. This is from 2010, so it would not have been  
13 based on the recent expert work.

14 Q. Okay. And what about the recent expert work,  
15 do you think that quantifies those impacts?

16 MR. ROMAN: Object to form; foundation.

17 A. I haven't reviewed them closely enough to  
18 determine exactly what -- how they speak to this  
19 question.

20 Q. (BY MR. LEININGER) Okay. So you're not --  
21 you're not going to be testifying as to either of  
22 those impacts?

23 A. I'm not sure what I'll be testifying to. I  
24 may -- I'm still doing my rebuttal work or surrebuttal  
25 work or whatever.

1 Q. Okay. Let's look at the last bullet point  
2 here. It says, "New Mexico should not pay for Texas  
3 groundwater pumping impacts." Do you see that line?

4 A. Yes.

5 Q. Should New Mexico pay for New Mexico  
6 groundwater pumping impacts?

7 A. That's a good question. I -- I believe that  
8 the -- when I'm talking about pay for, what I'm  
9 referring to is reduction in allocation to account for  
10 is what I mean by pay for, and I believe that there  
11 was a reason to reduce the total allocation of water  
12 by the project, and unfortunately, they've made the  
13 entire reduction out of New Mexico or EBID's share,  
14 and none of it out of Texas' share.

15 Q. Okay. But the D3, the operating agreement  
16 principle is that deviations from the D2 curve will  
17 be -- will be accounted for in the -- in the  
18 allocation process; is that correct?

19 A. Yes. And how it accounts for them is by  
20 taking them all out of EBID's allocation.

21 Q. All right. And the deviations from the D2  
22 curve, I think you've testified to, is a result, at  
23 least in part, from groundwater pumping in New Mexico,  
24 correct?

25 A. I would say that the deviation from D2 is

1 caused by increased depletions, some of which occur in  
2 New Mexico, probably a large -- if -- if we're talk --  
3 the amount of increased depletions since the D2  
4 period, I would say the majority of those would have  
5 occurred in New Mexico. That would be my estimate.

6 Also, changes in other conditions since the D2 period,  
7 including changes in Rio Grande project accounting,  
8 which is another major factor, which was not  
9 considered in development of the D3 method.

10 Q. So with regard to post D2 after 1978,  
11 increase in depletions which have occurred in New  
12 Mexico by groundwater pumping -- let me get back to  
13 the original question. Should New Mexico pay for New  
14 Mexico's groundwater pumping impacts that are  
15 resulting?

16 A. I believe that an equitable and workable  
17 allocation method would adjust the allocation to  
18 account for the effect of New Mexico pumping on the  
19 allocation to EBID, but it would not reduce EBID's  
20 allocation for other factors not related to New  
21 Mexico.

22 Q. Not related to New Mexico groundwater  
23 pumping?

24 A. Right.

25 Q. Okay. All right. Let's move on.



1 (Discussion off the record.)

2 (Exhibit No. 16 was marked.)

3 Q. (BY MR. LEININGER) Dr. Barroll, you've been  
4 handed what's been marked as Exhibit 16. It's  
5 titled, "New Mexico Perspective on the 2008 Rio Grande  
6 Project Operations Agreement," by Estevan Lopez, P.E.  
7 director New Mexico Interstate Stream Commission,  
8 dated March 9, 2011. Have you seen this document  
9 before?

10 A. Yes.

11 Q. Did you help Mr. Lopez create this document?

12 A. I think I might have had a pass at a draft at  
13 one point.

14 Q. So let's -- let's go to the second page, just  
15 the second-to-last paragraph. It's one sentence.  
16 I'll read it into the record. "New Mexico believes  
17 that much of the reallocation of project water under  
18 the operating agreement is not in line with any  
19 physical changes in the system caused by New Mexicans,  
20 comma, rather it is due to changes in measurement  
21 methods, comma, natural variability, comma, changes in  
22 the allocation procedures, comma, groundwater pumping  
23 by Texas, comma, and Reclamation's system of credit."  
24 Let me try that last part again. "Reclamation's  
25 system of credits, period." Did I read that

1 correctly?

2 A. Yes.

3 Q. So -- so Mr. Lopez, New Mexico Interstate  
4 Stream Commissioner at this time in March, 2011, did  
5 not believe that the reallocation of the project water  
6 under the operating agreement is in line with trying  
7 to correct excessive groundwater pumping in New  
8 Mexico?

9 MR. ROMAN: Object to form; foundation.

10 A. I do not believe Commissioner Lopez would  
11 agree that the operating agreement was -- the changes  
12 caused by the operating agreement were related to  
13 excessive groundwater pumping in New Mexico.

14 Q. (BY MR. LEININGER) Right. I mean, there's no  
15 mention in this sentence of groundwater pumping by New  
16 Mexicans, correct?

17 A. That's correct.

18 Q. All right. Let's --

19 A. Except as it mentions physical changes in the  
20 system caused by New Mexicans. I believe that is code  
21 for groundwater pumping, but -- or, rather, would  
22 include groundwater pumping is what I mean.

23 Q. So what's your understanding of the portion  
24 of the sentence that says, "The reallocation under the  
25 operating agreement is not in line with any physical

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IN THE SUPREME COURT OF THE UNITED STATES  
BEFORE THE OFFICE OF THE SPECIAL MASTER  
HON. MICHAEL J. MELLOY

STATE OF TEXAS	)	
	)	
Plaintiff,	)	
	)	Original Action Case
VS.	)	No. 220141
	)	(Original 141)
STATE OF NEW MEXICO,	)	
and STATE OF COLORADO,	)	
	)	
Defendants.	)	

THE STATE OF TEXAS :  
COUNTY OF HARRIS :

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 above and foregoing answers of the witness, PEGGY BARROLL, to the interrogatories as indicated were made before me by the said witness after being first duly sworn to testify the truth, and same were reduced to typewriting under my direction; that the above and foregoing deposition as set forth in typewriting is a full, true, and correct transcript of the proceedings had at the time of taking of said deposition.

I further certify that I am not, in any capacity, a regular employee of the party in whose

1       behalf this deposition is taken, nor in the regular  
2       employ of this attorney; and I certify that I am not  
3       interested in the cause, nor of kin or counsel to  
4       either of the parties.

5  
6               That the amount of time used by each party at  
7       the deposition is as follows:

8               MR. LEININGER - 03:03:19

              MR. ROMAN - 00:00:00

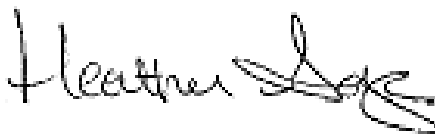
9               MR. SOMACH - 01:04:52

              MR. WALLACE - 00:00:00

10              MS. O'BRIEN - 00:00:00

              MS. BARNCASTLE - 00:00:00

11  
12              GIVEN UNDER MY HAND AND SEAL OF OFFICE, on  
13       this, the 24th day of February, 2020.

14                               

15               HEATHER L. GARZA, CSR, RPR, CRR

              Certification No.: 8262

16               Expiration Date: 04-30-22

              VERITEXT LEGAL SOLUTIONS

17               Firm Registration No. 571

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              1-800-336-4000

1 droman@roblesrael.com

2 February 24, 2020

3 RE: Texas v. New Mexico

4 DEPOSITION OF: Peggy Barroll (Volume 2) (# 3852890)

5 The above-referenced witness transcript is  
6 available for read and sign.

7 Within the applicable timeframe, the witness  
8 should read the testimony to verify its accuracy. If  
9 there are any changes, the witness should note those  
10 on the attached Errata Sheet.

11 The witness should sign and notarize the  
12 attached Errata pages and return to Veritext at  
13 errata-tx@veritext.com.

14 According to applicable rules or agreements, if  
15 the witness fails to do so within the time allotted,  
16 a certified copy of the transcript may be used as if  
17 signed.

18 Yours,

19 Veritext Legal Solutions  
20  
21  
22  
23  
24  
25

WITNESS CORRECTIONS AND SIGNATURE

Please indicate changes on this sheet of paper, giving the change, page number, line number and reason for the change. Please sign each page of changes.

PAGE/LINE	CORRECTION	REASON FOR CHANGE
-----------	------------	-------------------

214/13	change "for" to "or"	transcription error
--------	----------------------	---------------------

223/13+14	omit "from surface water to groundwater"	I misspoke
-----------	--	------------

225/9	change "that the" to "what sort of"	I misspoke
-------	-------------------------------------	------------

263/13	change "in" to "and"	transcription error
--------	----------------------	---------------------

277/3	change "and" to "in"	transcription error
-------	----------------------	---------------------

281/19	change "I've sorted" to "assorted"	transcription error
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297/4	should read "effect of changes in accounting between the two"	transcription error
-------	---	---------------------

306/25-2	should read "the whole delta is 137,000 AF, and the delta	
307/1	part I'm getting out of accounting is about 75,000"	
	I found the numbers and made the calculation	

337/8	should read "We demonstrated that the quality etc"	
	I misspoke	

PEGGY BARROLL, VOLUME II

Job No. TX3852890

Page 347

S I G N A T U R E   O F   W I T N E S S

I, PEGGY BARROLL, solemnly swear or affirm under the pains and penalties of perjury that the foregoing pages contain a true and correct transcript of the testimony given by me at the time and place stated with the corrections, if any, and the reasons therefor noted on the foregoing correction page(s).

Peggy Barroll 5/4/2020

PEGGY BARROLL, VOLUME II

Job No. 3995842

IN THE SUPREME COURT OF THE UNITED STATES  
BEFORE THE OFFICE OF THE SPECIAL MASTER  
HON. MICHAEL J. MELLO

STATE OF TEXAS	)	
	)	
Plaintiff,	)	
	)	Original Action Case
VS.	)	No. 220141
	)	(Original 141)
STATE OF NEW MEXICO,	)	
and STATE OF COLORADO,	)	
	)	
Defendants.	)	

\*\*\*\*\*

REMOTE ORAL AND VIDEOTAPED DEPOSITION OF  
JOHN D'ANTONIO  
JUNE 25, 2020  
VOLUME 2

\*\*\*\*\*

REMOTE ORAL AND VIDEOTAPED DEPOSITION of JOHN D'ANTONIO, produced as a witness at the instance of the Plaintiff State of Texas, and duly sworn, was taken in the above-styled and numbered cause on June 25, 2020, from 9:15 a.m. to 12:57 p.m., before Heather L. Garza, CSR, RPR, in and for the State of Texas, recorded by machine shorthand, at the offices of HEATHER L. GARZA, CSR, RPR, The Woodlands, Texas, pursuant to the Federal Rules of Civil Procedure and the provisions stated on the record or attached hereto; that the deposition shall be read and signed.



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5 Ken Knox

Rolf Schmidt-Petersen

6 Al Blair

Gary Esslinger

7 Erek Fuchs

Ian Ferguson

8 Michelle Estrada-Lopez

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## EXAMINATION INDEX

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Active Water Resource Management in the  
Lower Rio Grande Tools for a New Era in  
Water Management PowerPoint Presentation

EXHIBIT NO.4	210
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United States Department of the Interior  
Geological Survey Report Dated  
October 23, 1947

1 THE VIDEOGRAPHER: Today is Thursday,  
2 June 25th, 2020. The time is 9:15 a.m. We're on the  
3 record.

4 JOHN D'ANTONIO,  
5 having been first duly sworn, testified as follows:

6 E X A M I N A T I O N

7 BY MR. SOMACH:

8 Q. Good morning, Mr. D'Antonio.

9 A. Good morning.

10 Q. How are you this morning?

11 A. Fine. Thank you. How are you?

12 Q. Good. And you've got all of your -- your  
13 various electronic equipment functioning at this point  
14 in time; is that correct?

15 A. I do, yes. It's -- I can see the realtime  
16 going on now, so thank you.

17 Q. Good.

18 MR. SOMACH: Let's do some appearances  
19 here for the record. This is Stuart Somach, attorney  
20 of record for the State of Texas in this litigation,  
21 and with me also on behalf of the State of Texas are  
22 Francis Goldsberry, Theresa Barfield, Rich Deitchman,  
23 and Robert Hoffman. Those are the names that I see on  
24 the screen that I have in front of me. If there's  
25 anybody else for Texas, why don't you make your

1 particular irrigator, it doesn't necessarily benefit  
2 the individual irrigator.

3 Q. Could New Mexico, through a combination of  
4 increased consumptive use and better efficiency in  
5 terms of the use of Rio Grande water, could New  
6 Mexico, EBID in this case, consume a hundred percent  
7 of the water that's released from Caballo?

8 MR. WECHSLER: Objection; vague.

9 Q. (BY MR. SOMACH) And when I say "could," I --  
10 I don't mean whether they physically could. Whether  
11 they could do that under the Compact. Would that be  
12 permissible under the Compact?

13 A. I suppose they could. Yeah, I think that's  
14 the extent of my answer.

15 Q. Okay. So as I understood your answer was  
16 that it would be permissible for New Mexico to consume  
17 a hundred percent of the water that was released from  
18 Elephant Butte reservoir?

19 MR. WECHSLER: Objection; vague.

20 Q. (BY MR. SOMACH) That --

21 A. No, that -- that's not my answer.

22 Q. Correct what I said. Tell me why that's  
23 wrong.

24 A. Because New Mexico would not consume a  
25 hundred percent of the water released from Elephant

1 Butte. They would only -- they would only consume the  
2 portion that they were allotted with -- with respect  
3 to their percentage allocation.

4 Q. So 57 percent is the -- the limit on how much  
5 could be consumed in New Mexico; is that correct?

6 MR. WECHSLER: Object to form.

7 A. No, I mean, there's other -- there's other  
8 uses, obviously, and I talked about project supply  
9 consisting of not only the usable water, which is  
10 apportioned between Elephant Butte and -- and El Paso  
11 No. 1, but there's also inflow below Elephant Butte,  
12 and there's also return drain flows, and there's also  
13 conjunctive groundwater use that's used in both  
14 states. So it's not the only water.

15 Q. (BY MR. SOMACH) But I'm talking -- right now,  
16 I'm talking about water that was contemplated in the  
17 Compact and that is being released from -- from  
18 Caballo. Is there a limit on how much of that water  
19 can be consumed in New Mexico?

20 MR. WECHSLER: Objection; asked and  
21 answered.

22 Q. (BY MR. SOMACH) I -- there's a question  
23 pending, Mr. D'Antonio, notwithstanding Mr. Wechsler's  
24 objection.

25 A. It was asked and answered.



1           Q.     So tell me what your answer was.

2           A.     Your question is there a limit on how much  
3 water can be consumed in New Mexico, and the answer --  
4 it's the surface water -- the surface water piece. I  
5 think that's what you were asking. The surface water  
6 that -- there is a limit on the surface water that can  
7 be used based on the apportionment from the Compact,  
8 but there are other sources of water as I stated in  
9 the previous answer.

10          Q.     Okay. Well, we'll come to the other sources  
11 of water, but -- but let's focus on the surface water  
12 apportioned from the Compact. I'm -- I'm not  
13 paraphrasing. What's the limit? What is the limit?

14          A.     The limit of the surface water is -- is the  
15 apportionment associated with the -- with the annual  
16 delivery, which is 57 percent for New Mexico users.

17          Q.     And -- and how is -- how are return flows  
18 factored into the apportionment if they're factored in  
19 at all?

20          A.     I -- I leave those details to the folks that  
21 are my water master down there on how they're doing  
22 that.

23          Q.     Is this at all a -- in your -- in your  
24 opinion, is this at all -- at all a Compact question?

25          A.     Well, yes, it's -- it's a Compact

1 apportionment, and -- and -- well, if you think about  
2 it from a -- from the standpoint of the surface water  
3 portion, the 57 percent of what's delivered, New  
4 Mexico farmers can use that to total consumption. So  
5 they can use some of their return flows on -- on their  
6 project lands within New Mexico until that surface  
7 water allocation is used -- is totally used.

8 Q. I may -- I may come back to that. That's an  
9 interesting description. I'm going to have to think  
10 about it a little bit. What does -- does New Mexico  
11 have any obligation to Texas under the Compact once it  
12 delivers water to the Elephant Butte reservoir?

13 A. Not within the terms of the Compact.

14 Q. So it has no obligation to -- to Texas below  
15 Elephant Butte reservoir; is that -- is that correct?  
16 Is that your view?

17 MR. WECHSLER: Objection.

18 A. Identify who -- "so it," who is "it"?

19 Q. (BY MR. SOMACH) The State of New Mexico is  
20 "it," figuratively and literally.

21 A. The State of New Mexico has an obligation to  
22 deliver Compact water to the project.

23 Q. At Elephant Butte reservoir; is that -- is  
24 that --

25 A. That's correct.

1           Q.   Does New Mexico have any obligation to ensure  
2   that the -- the flow of water once released from  
3   Elephant Butte reservoir that is earmarked under the  
4   Compact for Texas is not impaired by activities within  
5   New Mexico?

6                   MR. WECHSLER:   Object to form.

7           A.   I would say not as identified by the Compact.

8           Q.   (BY MR. SOMACH)   Well, if not identified by  
9   the Compact, under what other circumstances would --  
10   would State of New Mexico have an obligation not to  
11   allow those flows to be impaired?

12          A.   Well, let me be clear.   The Compact is silent  
13   in that regard downstream of Elephant Butte.   As state  
14   engineer, I'm very involved, my office is very  
15   involved in -- in making sure that -- that there's no  
16   new depletions to the system on how we managed water  
17   all the way to the state line.

18          Q.   Are you aware of any provision in the Compact  
19   that would allow New Mexico to take back water that it  
20   delivered under Article 4, that delivered to Elephant  
21   Butte reservoir under Article 4?

22                   MR. WECHSLER:   Object to form.

23          A.   I don't know what "take back water" means.

24          Q.   (BY MR. SOMACH)   Well, utilized water outside  
25   of the contract with Elephant Butte Irrigation

1 District.

2 MR. WECHSLER: Again, object to form.

3 A. I -- that question is still -- still don't  
4 know how to answer that particular question. I don't  
5 understand it.

6 Q. (BY MR. SOMACH) Let me -- let me -- let me  
7 rephrase it a little bit then. In order for water  
8 released from Elephant Butte reservoir or Caballo to  
9 get to EBID lands, do you agree that it can't be  
10 impeded or impaired in terms of the flows of the river  
11 by non-EBID actors -- irrigators?

12 A. Yes.

13 Q. Okay. In order for water released from  
14 Caballo to get to EP -- EP No. 1, do you agree that it  
15 can't be impeded by non-EBID actors? In other words,  
16 the same question, only with respect to EP No. 1?

17 MR. WECHSLER: Objection; vague.

18 A. It is vague. Non-EBI -- EBID actors. I'm  
19 assuming you're saying water users?

20 Q. (BY MR. SOMACH) Yeah. Surface water users  
21 within Elephant Butte Irrigation District, or more  
22 specifically, the Elephant Butte Irrigation District.  
23 All I'm saying is, same question I asked you with  
24 respect to EBID, that non-project water users -- maybe  
25 that's a better way of utilizing that -- may not

1     impede the flow of surface water to either EBID or EP  
2     No. 1; is that correct?

3                   MR. WECHSLER:  Objection; vague.

4           A.     Yes.

5           Q.     (BY MR. SOMACH)  Okay.  Let's take a -- a  
6     10 -- what -- what would you prefer?  Let's go 15  
7     minutes.  It's -- it's about 11 now so let's start  
8     around 25 after the hour.

9           A.     Okay.

10                  MR. SOMACH:  Okay.

11                  THE VIDEOGRAPHER:  The time is 10:11  
12     a.m.  We're off the record.

13                                 (Break.)

14                  THE VIDEOGRAPHER:  The time is 10:27  
15     a.m.  We're back on the record.

16                  MR. SOMACH:  You can take down the  
17     exhibit so we can see -- thank you.

18           Q.     (BY MR. SOMACH)  John, you had indicated that  
19     there were additional water as part of -- that become  
20     part of the flow of the Rio Grande, and, again, if I'm  
21     mischaracterizing what you said, just -- just correct  
22     me, but below Elephant Butte reservoir, below Caballo,  
23     what I would call additional accretions into the  
24     river.  What are those?  What -- what are you talking  
25     about when you talk about those additional flows into

1           Q.    And as I understand, it is the Office of  
2 State Engineer that provides that; is that correct?

3           A.    Yes.

4           Q.    And that includes surface and groundwater or  
5 -- does it include surface and groundwater?

6           A.    Yes.

7           Q.    Do you agree that the operation of the Rio  
8 Grande project is protected by the Compact?

9           A.    Yes.

10          Q.    Do you understand or do you agree that the  
11 apportionment of Rio Grande water in the project is  
12 protected by the Compact?

13          A.    Yes.

14          Q.    Do you agree that the Compact precludes New  
15 Mexico from allowing surface water allocated to the  
16 project and intended for Texas to be intercepted  
17 before it reaches the state line?

18                   MR. WECHSLER: Object to form.

19          A.    Well, I think the way I'd answer that is New  
20 Mexico doesn't intercept any -- any flow. It uses its  
21 allocation, so that's how I understand the question.

22          Q.    (BY MR. SOMACH) The question says intended  
23 for Texas. So it identifies water in the project or  
24 in the river that's identified and intended for Texas,  
25 doesn't include EBID water, and it's talking about

1 **surface water.**

2 A. So could I scroll up on your questions or --

3 **Q. You can.**

4 A. Okay. Yes. It precludes New Mexico from  
5 intercepting Texas' water.

6 **Q. Are you aware of any illegal surface water**  
7 **diversions below Elephant Butte reservoir?**

8 A. I'm aware there has been some throughout the  
9 years, and New Mexico, our office in Las Cruces, takes  
10 a very active role in enforcement and putting out  
11 cease and desist orders to stop flows in the  
12 diversions.

13 **Q. Are you familiar with the Gillis -- so-called**  
14 **Gillis wells?**

15 A. No.

16 **Q. Other than EBID's diversions under the**  
17 **project contracts, are there any other legal surface**  
18 **water diversions of the Rio Grande below Caballo?**

19 A. Any other legal diversions? One that I know  
20 of is the Bonita diversion, but that's got its own  
21 water rights, and as far as I know, it's a nonissue  
22 with respect to the Lower Rio Grande.

23 **Q. So is that it? That's the only diversion**  
24 **you're aware of that would be in your mind appropriate**  
25 **surface water diversion below --**

1       A.    I don't know that it's the only one.  It's  
2   the only one to my knowledge.

3       Q.    Okay.  Okay.  Can the pumping and extraction  
4   of groundwater affect surface water flows in the Rio  
5   Grande?

6       A.    Yes.

7       Q.    Has the amount of groundwater pumping to your  
8   knowledge within New Mexico below Caballo increased  
9   since 1938?

10      A.    I would say it's -- it's variable.  It  
11   increases during times of drought so in the '50s, in  
12   the '70s, in the early 2000s, it has increased.

13      Q.    Do you know whether or not groundwater levels  
14   below Elephant Butte, below Caballo, have declined  
15   since 1938?

16      A.    Well, I think from my looking at the  
17   information that I've seen, groundwater levels  
18   historically have come back after all of these drought  
19   periods, except for the -- the most recent one, and  
20   that was the only change condition that I could tell  
21   was the implementation of the 2008 operating agreement  
22   and how that operating agreement exacerbated  
23   groundwater pumping within the State of New Mexico and  
24   that groundwater level has not recovered since that  
25   operating agreement has been put in place.



1           Q.    Okay.  We'll talk a little bit later about  
2   the operating agreement.  I know the United States has  
3   some questions related to that, so we'll come back to  
4   that.

5                   Does increased groundwater pumping below  
6   Elephant Butte reservoir, below Caballo in New Mexico  
7   cause additional releases of water from Elephant Butte  
8   reservoir to ensure that project deliveries can be  
9   made?

10                   MR. WECHSLER:  Object to form.

11           A.    Ambiguous question as far as additional  
12   releases to whom.

13           Q.    (BY MR. SOMACH)  Let me ask you this question:  
14   Does groundwater pumping below Elephant Butte  
15   reservoir in New Mexico have, to your knowledge, any  
16   affect upon how the Rio Grande Reclamation project is  
17   operated?

18           A.    I'd say no.

19           Q.    What other water besides project water is  
20   delivered into Elephant Butte reservoir?  Let -- let  
21   me -- I actually don't mean project water.  What water  
22   besides Compact water is delivered into Elephant Butte  
23   reservoir?

24                   MR. WECHSLER:  Objection; ambiguous.

25           A.    San Juan-Chama water can be deposited in

1 Elephant Butte reservoir -- reservoir and so -- so is  
2 New Mexico credit water.

3 **Q. (BY MR. SOMACH) Any other water?**

4 A. Not that I'm aware of.

5 **Q. And the accounting of credit water is -- is**  
6 **done through the Compact Commission; is that correct?**

7 A. It's done through the engineer advisors of  
8 the respective states that make up the Compact.

9 **Q. What about the San Juan-Chama water, how is**  
10 **that accounted for?**

11 A. It's accounted for the same way, essentially  
12 the -- the engineer advisors talk and look at the  
13 models associated with the -- with that water and how  
14 to -- how to account for it, how to make sure, where  
15 it's consumptively used, in what proportion and so  
16 they -- they quantify it and make sure there's an  
17 accountable record of the San Juan-Chama water.

18 **Q. And explain -- I mean, I -- I know what San**  
19 **Juan-Chama water is, but for the record, could you**  
20 **describe what San Juan-Chama water is?**

21 A. Sure. It's trans-mountain water that's  
22 absorbed from the Colorado system. It was a Bureau of  
23 Reclamation project that -- that allows for contracts  
24 to utilize that water, and there's several  
25 entities/contractors that have the right to use that

1 to Texas?

2 A. Not in that statement. The way that  
3 statement is written, no, it doesn't require that.

4 Q. So let me add that as a question. Is New  
5 Mexico obligated to protect and ensure that Texas'  
6 apportioned rights are protected? I'll just insert  
7 that instead of senior water rights.

8 MR. WECHSLER: Object to form.

9 A. I would object to saying obligated, but the  
10 ancillary benefit is that New Mexico does manage its  
11 water that has an ancillary affect of protecting that  
12 water supply.

13 Q. (BY MR. SOMACH) New Mexico does, but it  
14 doesn't have to; is that correct?

15 MR. WECHSLER: Object to form.

16 A. I would say yes.

17 Q. (BY MR. SOMACH) Let's take a look at the very  
18 next line. Or let me -- before we turn, before you  
19 move, I just noticed these -- these graphs about  
20 growing irrigation demand and growing M&I demand, and  
21 I know that the -- the numeric numbers are very  
22 difficult to read, but I believe under irrigation  
23 demand, the last year shown is 1995, and the last year  
24 shown under the municipal demand is 2001. I don't  
25 know if you could concur that what I just said is --

1 is true? I think you can see it better, actually, on  
2 the projected.

3 A. I'm trying to enlarge the screen here without  
4 going to the next slide. So the question, yeah, 1995,  
5 and 2001, yes.

6 Q. Okay. To your knowledge, has irrigation  
7 demand increased after 1995?

8 A. That's a hard question other than I think,  
9 you know, there's been some increase in high water use  
10 crops, but there's also been a reduction in acreage,  
11 so the question is has irrigation demand increased  
12 after '95? I mean, I could say it's somewhat balanced  
13 based on -- based on some of the decreases that have  
14 happened that I'm aware of, irrigated acreage at least  
15 in -- in the New Mexico portion going down from 90,000  
16 acres down to about 70, 75,000 acres. So --

17 Q. The reason --

18 A. That's my knowledge.

19 Q. The reason I ask the question is that the  
20 chart is entitled, "Growing irrigation demand."

21 A. Right.

22 Q. What you've described is anything but  
23 growing. You've described irrigation demand that is  
24 stable.

25 A. Well, I think your question was after 1995,

1 so I don't have that information in front of me or  
2 that data in front of me, so I -- I would leave that  
3 to the experts that we have in New Mexico to maybe ask  
4 those questions during their depositions.

5 Q. Okay. So you don't know what demand has been  
6 after -- irrigation demand has been after 1995 or  
7 what's depicted on this graph?

8 A. No, not immediately, I don't.

9 Q. And that would be the same with respect to  
10 the graph describing growing municipal and industrial  
11 demand?

12 A. Yeah, I don't know specific numbers.

13 Q. Do you know whether or not municipal and  
14 industrial demand has grown since 2001?

15 A. I mean, I would say yes, cities are growing,  
16 so it's hard to say no on that particular piece.

17 Q. If you take a look at the next slide  
18 US0539813. See that? And that chart is entitled --  
19 or that page, that slide is entitled, "The facts we  
20 must deal with." Is that correct?

21 A. Yes.

22 Q. Okay. And what are the -- seems to be  
23 focused on groundwater. What are those facts?

24 A. So groundwater use has increased in the Lower  
25 Rio Grande. Groundwater pumping for irrigation use

1 alone may be as high as 50,000 to 100,000 acre-feet  
2 per year in full project supply years and 200,000 to  
3 300,000, question mark, acre-feet per year in low  
4 project supply years.

5 Q. Is -- is -- or was, I should say, that those  
6 facts of concern to you as state engineer?

7 A. Yes, they were at that time.

8 Q. How about now? Are they no longer of concern  
9 to you?

10 A. Well, let me answer it this way: They are of  
11 concern -- more of a concern since the operating  
12 agreement was put in place. I have to refresh this --  
13 this realtime thing here. Oh, shoot. It kicked me  
14 off the system when I refreshed, my computer went  
15 down. Oh, there we go. Okay. I've got you back on.

16 Q. You got it?

17 A. Yeah.

18 Q. So the question was: In reference to  
19 concerns, you said you were concerned then about  
20 groundwater, and I said what about now?

21 A. Well, I would say more concerned now based on  
22 the implementation of the 2008 operating agreement,  
23 and more specifically, the accounting associated with  
24 it, because the transfer of -- of additional surface  
25 water to -- to the Texas farmers has greatly increased

1 the need for New Mexico farmers to pump groundwater.  
2 When -- when I was putting this active water resource  
3 management initiative in place, I would have had  
4 control of limitations on -- on how we would get  
5 together with this Lower Rio Grande Water Users group  
6 and implement, I would say limitations on pumping and  
7 other things that were in my control, since -- since  
8 the operating agreement, yeah, I'm even more concerned  
9 about the groundwater pumping because -- because it  
10 has changed the project apportionments and is forcing  
11 New Mexico to pump much greater amounts of  
12 groundwater.

13 Q. Let's take a look at the next slide, which is  
14 0539814.

15 A. Is that it?

16 Q. I used the word concerned before. You define  
17 it here as a problem. Is that -- is that correct?

18 A. Well, I want to confirm I'm on the right  
19 slide.

20 Q. That's it.

21 A. Okay.

22 Q. We got it so large now that -- but it's good  
23 for my old eyes, I can assure you, so I'm not  
24 complaining.

25 A. Let me reduce it a little bit, so I can see

1 more of it. Okay.

2 Q. You define groundwater pumping here as a  
3 problem; is that correct?

4 A. Yes.

5 Q. And you -- you talk about heavy reliance on  
6 groundwater without controls on it and then you list  
7 three bullet points, right?

8 A. Yes.

9 Q. And you say in the first bullet point, I will  
10 repeat essentially what you said before, in that  
11 groundwater and surface waters are linked, but here  
12 you use the word closely linked. What does -- what  
13 does that mean?

14 A. A direct connection, hydrologic connection.

15 Q. And on the second bullet point, you  
16 say, "Pumping" -- presumably groundwater  
17 pumping -- "reduces river flow"; is that correct?

18 A. Yes.

19 Q. Okay. So river flow is how water gets from  
20 Elephant Butte reservoir to Texas; is that -- is that  
21 correct?

22 A. Yes.

23 Q. So if groundwater pumping in New Mexico  
24 reduces river flow, does that mean it also reduces the  
25 amount of water flowing to Texas?



1 linkage between surface and groundwater and the fact  
2 that pumping of groundwater reduces river flow, that's  
3 what this slide is talking about when it talks about  
4 the claims that New Mexico groundwater pumping is  
5 affecting surface water flows?

6 MR. WECHSLER: Object to form.

7 Q. (BY MR. SOMACH) Is that correct?

8 A. Yes.

9 Q. Turn to 0 -- US0539816.

10 A. Is that the next slide? That number doesn't  
11 come up on my screen, so I can't --

12 Q. It's the next -- you had it. It was the next  
13 slide. That's it. You got it.

14 A. Okay.

15 Q. What is this slide trying to depict?

16 A. The title is, "Risks to the State of New  
17 Mexico Water Users."

18 Q. And what are those risks?

19 A. Litigation is -- interstate litigation is  
20 obviously a risk.

21 Q. Well, you were very prophetic there. It's  
22 like you're an oracle. But what you're worried about  
23 in this slide is that if you don't address groundwater  
24 pumping and its impact on surface water, Texas in a  
25 sense may go to Supreme Court to complain about it; is

1 that -- is that accurate?

2 A. Yeah. According to this slide, it is.

3 Q. Okay. And the second bullet says, "The  
4 Supreme Court could require offsets for all  
5 post-Compact groundwater pumping." And you cite a  
6 precedent for that; is that correct?

7 A. I did in this presentation, yes.

8 Q. And in our case, post-Compact groundwater  
9 pumping would include anything after 1938. That's  
10 correct, isn't it?

11 MR. WECHSLER: Object to form.

12 A. Based on your question, yes.

13 Q. (BY MR. SOMACH) Okay. And -- and the last  
14 bullet point is interesting. It says, "Loss of the  
15 use of aquifer as a drought reserve." That kind of  
16 goes to the conjunctive use of surface and groundwater  
17 that you were talking about earlier, doesn't it?

18 A. Yes, it does.

19 Q. Okay. If you can turn to the next slide,  
20 which for the record is US0539817, can you see that?  
21 Well, you had it. There it is.

22 A. This one? Okay.

23 Q. Uh-huh. The -- the -- there appears to be --  
24 what you're saying here is that it's not just your  
25 concern, it's the governor and the legislature's

1 concern; is that correct?

2 A. Yes.

3 Q. Okay. And then the second bullet point there  
4 says, "Legislators have admonished the State Engineer  
5 not to let the Pecos River history repeat itself  
6 anywhere, including on the Lower Rio Grande." What is  
7 that -- what is that referring to?

8 A. The Supreme Court action that Texas took  
9 against New Mexico, I believe, in -- when they filed  
10 in 1974, but that was a different case, and there  
11 were -- there were measured under deliveries at the  
12 state line there. This is not the case in the same  
13 case in the Rio Grande, and the whole idea behind this  
14 presentation is to get the legislature and the  
15 governor behind giving me funding so that we could put  
16 the tools in place to preclude Texas from filing a  
17 lawsuit against New Mexico under some of those same --  
18 some of those same concerns. And, again, my -- my  
19 feeling was we were managing the Lower Rio Grande in a  
20 way that would allow us to stay out of litigation by  
21 taking care of and administering water rights based on  
22 this active water resource management initiative. So  
23 I know what the slides say, but the intent -- the  
24 intent was to keep it in control and -- and the  
25 corrections within New Mexico and -- and I think we

1 definitely would have been able to do that, and I  
2 think the operating agreement flipped that strategy on  
3 its head because it so exacerbated the need for New  
4 Mexico to pump additional groundwater before we could  
5 put this active water resource management initiative  
6 in place.

7 Q. Turn to Slide No. 0539815, which I think is  
8 the next slide. Oh, you went past it. There you go.  
9 Here, you're talking about the action that is needed;  
10 is that correct?

11 A. Yes.

12 Q. So let's -- let's start with the first bullet  
13 point, "Improved regulation of groundwater pumping is  
14 imperative." What -- what has been done to improve  
15 the regulation of groundwater pumping in the Lower Rio  
16 Grande?

17 A. I put a metering order in place in December  
18 of 2004, requiring all groundwater pumping to be  
19 metered and followed up with two additional -- I think  
20 an extension of the orders and two additional orders  
21 in subsequent years to make sure there was compliance  
22 with -- with that order.

23 Q. Is that it?

24 A. Well, no -- well, there was some other things  
25 that happened. Obviously in prior -- and I believe it

1 was in 1999, there was some Mesilla -- Mesilla  
2 guidelines, administrative guidelines, that were put  
3 in place, that the state engineer put in place that  
4 was the intent of managing groundwater pumping, but  
5 you really -- you really can't put -- you really can't  
6 manage what you don't measure, so it was necessary to  
7 put -- put the -- you know, the -- the meters in place  
8 and require the meters to be there. I also  
9 established a water master district not only there but  
10 other areas of the state and set up a water master  
11 within the Lower Rio Grande to start taking control  
12 and -- and quantifying the water that was being --  
13 that was being pumped and -- and so that's -- that  
14 happened. We even provided -- the State provided  
15 low-interest loan funding, because I got sued by  
16 Elephant Butte Irrigation District on them not wanting  
17 me to impose metering to them. We even provided  
18 low-interest loan money for them to get into  
19 compliance with that cost so the metering was not  
20 imperative. So when you look at improved regulation  
21 of groundwater pumping, we were -- we were putting  
22 that action in place through -- through those --  
23 through those efforts.

24 Q. Let's turn to the -- to the next slide. It's  
25 actually two slides down. For the record, the one I'm

1 talking about the US0539820. It's the one that  
2 says, "What LRGWUO can do."

3 A. Okay.

4 Q. What is LRGWUO? Is that the association; is  
5 that right?

6 A. Yes. The Lower Rio Grande Water Users  
7 Organization, I think.

8 Q. So have the cooperative agreements that are  
9 talked about in the diamond bullet for shortage  
10 sharing, have they been developed?

11 A. No, they have not been developed yet.

12 Q. Okay. What about the second diamond bullet,  
13 "Strengthen water leasing mechanisms, implement  
14 special water users associations," has that occurred?

15 A. Not yet.

16 Q. "Develop alternative methods to ensure  
17 seniors are kept whole." What -- what alternative  
18 methods have been developed since 2005?

19 A. Well, we've -- we've teed -- we've teed these  
20 issues up. Obviously we got -- we got challenged  
21 in -- in district court on trying to establish the  
22 district-specific regulations. We got -- we got sued  
23 on -- on those particular regulations. We wound up  
24 actually prevailing after the case went through  
25 district court, court of appeals in New Mexico Supreme

1 Court in 2012 that New Mexico Supreme Court affirmed  
2 all of the actions that the state engineer took  
3 previously to put the active water resources  
4 management tools in place, but that's also about the  
5 time of the lawsuit. And so I think -- I think some  
6 of the activities that we've been trying to do have  
7 been hampered by -- by the lawsuit, obviously, and  
8 by -- by other things beyond the state engineer's  
9 control. Stuart, your mic is off. I can't hear you.

10 Q. I did that because the gardeners were outside  
11 and I couldn't hear, let alone I'm sure you can't. On  
12 that second -- on that slide -- that first bullet  
13 says, "Participate in developing different  
14 district-specific regulations." Do you see that?  
15 Have district-specific regulations been promulgated or  
16 developed?

17 MR. WECHSLER: What page are you looking  
18 at?

19 A. What page are you on now, Stuart? Yeah.

20 Q. (BY MR. SOMACH) It's -- it's the next page.  
21 Says, "In addition." And that, for the record, is  
22 US0539821?

23 A. Yes. So draft district-specific regulations  
24 have been put -- have been drafted. I mean, we  
25 drafted the -- the -- but they haven't been formalized

1 based on a lot of these other issues that have gotten  
2 in the way.

3 Q. So they've been drafted, but they haven't  
4 been actually promulgated; is that correct?

5 A. That's correct.

6 Q. And so they obviously haven't also been  
7 implemented; is that correct?

8 A. That's correct.

9 Q. What about AWRMs for the Lower Rio Grande,  
10 have they been promulgated?

11 A. I'm not sure I understand that question.  
12 AWRMs aren't things that need to be promulgated.  
13 Active water resource management is -- is a -- there's  
14 a statute that was passed. Are you talking about  
15 district-specific regulations?

16 Q. Yes. So how you would actually implement the  
17 AWRM, a state statute, would be through  
18 district-specific regulations; is that -- is that  
19 correct? Am I understanding that correct?

20 A. Yeah. Each -- each particular basin would  
21 have its own district-specific regulations that would  
22 be put together by input and from input from all the  
23 stakeholders within that particular basin.

24 Q. That hasn't been done yet is what I  
25 understood you to say?



1           A.     No, it has not been done yet.

2           **Q.     Okay. Has there been a reduction in**  
3 **groundwater pumping in New Mexico in the Rincon and**  
4 **Mesilla valleys since 2005?**

5                   **MR. WECHSLER:** Objection; vague.

6           A.     I don't know.

7                   **MR. SOMACH:** Okay. Let's -- let's --  
8 we've been at this now for maybe an hour and a half so  
9 let's take a break. Let's come back at 11:05, 12:05.  
10 I will say that I'm not sure how much longer I'll go  
11 and whether we'll finish with me today, but in any  
12 event, the United States is going to follow. But  
13 I'll -- I'll try to get as much done as I can do in  
14 the next hour before we have to break today.

15                   **THE WITNESS:** Okay.

16                   **MR. SOMACH:** If I do the time right,  
17 11:55 means -- 10:55 means it's 11:55 so it's almost  
18 12:00. So that's -- what I did say is accurate. I'll  
19 try to get wrapped up in terms of my questions before  
20 we break for the day, but if I can't, we'll trickle  
21 over into tomorrow and then U.S. will -- will pick up.  
22 Just to let you know my plans. Okay. That's it.  
23 Let's -- let's talk about ten after.

24                   **THE VIDEOGRAPHER:** The time is 10:56  
25 p.m. We're off the record. I'm sorry. 11:56 a.m.

IN THE SUPREME COURT OF THE UNITED STATES  
 BEFORE THE OFFICE OF THE SPECIAL MASTER  
 HON. MICHAEL J. MELLOY

STATE OF TEXAS	)	
	)	
Plaintiff,	)	
	)	Original Action Case
VS.	)	No. 220141
	)	(Original 141)
STATE OF NEW MEXICO,	)	
and STATE OF COLORADO,	)	
	)	
Defendants.	)	

THE STATE OF TEXAS :  
 COUNTY OF HARRIS :

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 above and foregoing answers of the witness, JOHN D'ANTONIO, to the interrogatories as indicated were made before me by the said witness after being first remotely duly sworn to testify the truth, and same were reduced to typewriting under my direction; that the above and foregoing deposition as set forth in typewriting is a full, true, and correct transcript of the proceedings had at the time of taking of said deposition.

I further certify that I am not, in any capacity, a regular employee of the party in whose

1 behalf this deposition is taken, nor in the regular  
2 employ of this attorney; and I certify that I am not  
3 interested in the cause, nor of kin or counsel to  
4 either of the parties.

5  
6 That the amount of time used by each party at  
7 the deposition is as follows:

8 MR. SOMACH - 03:07:40

MR. WECHSLER - 00:00:00

9 MR. LEININGER - 00:00:00

MR. WALLACE - 00:00:00

10 MR. HICKS - 00:00:00

11  
12 GIVEN UNDER MY HAND AND SEAL OF OFFICE,  
13 this, the 21st day of July, 2020.

14 

HEATHER L. GARZA, CSR, RPR, CRR

15 Certification No.: 8262

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## WITNESS CORRECTIONS AND SIGNATURE

Please indicate changes on this sheet of paper,  
giving the change, page number, line number and reason  
for the change. Please sign each page of changes.

PAGE/LINE	CORRECTION	REASON FOR CHANGE
51/ 24	change "account" to "accounted"	Correction
57/ 20	change "ensues" to "sued"	Correction
58/ 4	capitalize "n" in "new"	Correction
60/ 25	change "was" to "were"	Correction
70/ 8	change "a" to "an"	Correction
73/ 7&8	delete "you know don't adjudicate interstate compact variable supply where it's --"	Correction
76/ 11	change "there" to "they"	Correction
76/ 12	delete "case in the"	Correction
78/ 7	change "metering to" to "metering on"	Correction
78/ 19	delete "that cost so"	Correction
78/ 19	change "was" to "so that cost was"	Correction
78/ 20	change "imperative" to "a factor"	Correction
79/ 25	change "in" to "and in the"	Correction
80/ 1	change "that New Mexico Supreme Court" to "they"	Correction
83/ 8,9 & 19	change "waterline" to "water law"	Correction
83/ 10	change "attendance" to "obligation"	Correction
83/ 13	change "in" to "and"	Correction

  
JOHN D'ANTONIO, VOLUME II

## WITNESS CORRECTIONS AND SIGNATURE

Please indicate changes on this sheet of paper,  
giving the change, page number, line number and reason  
for the change. Please sign each page of changes.

PAGE/LINE	CORRECTION	REASON FOR CHANGE
83/ 14	change "add" to "an"	Correction
91/ 14	change "a few" to "to"	Correction
91/ 15	change "than" to "that"	Correction
96/ 13	change "that" to "that need to"	Correction
96/ 17	change "full" to "whole"	Correction
100/ 16	change "nonuse" to "nonuse an issue"	Correction
100/17	change "issued" to "issues"	Correction

  
JOHN D'ANTONIO, VOLUME II



## S I G N A T U R E   O F   W I T N E S S

I, JOHN D'ANTONIO, solemnly swear or affirm under the pains and penalties of perjury that the foregoing pages contain a true and correct transcript of the testimony given by me at the time and place stated with the corrections, if any, and the reasons therefor noted on the foregoing correction page(s).

  
JOHN D'ANTONIO, VOLUME II

Job No. 63559

IN THE SUPREME COURT OF THE UNITED STATES  
BEFORE THE OFFICE OF THE SPECIAL MASTER  
HON. MICHAEL J. MELLO

STATE OF TEXAS	)	
	)	
Plaintiff,	)	
	)	Original Action Case
VS.	)	No. 220141
	)	(Original 141)
STATE OF NEW MEXICO,	)	
and STATE OF COLORADO,	)	
	)	
Defendants.	)	

\*\*\*\*\*

REMOTE ORAL AND VIDEOTAPED DEPOSITION OF  
JENNIFER STEVENS  
JULY 27, 2020

\*\*\*\*\*

REMOTE ORAL AND VIDEOTAPED DEPOSITION of  
JENNIFER STEVENS, produced as a witness at the  
instance of the Plaintiff State of Texas, and duly  
sworn, was taken in the above-styled and numbered  
cause on July 27, 2020, from 9:01 a.m. to 1:45 p.m.,  
before Heather L. Garza, CSR, RPR, in and for the  
State of Texas, recorded by machine shorthand, at the  
offices of HEATHER L. GARZA, CSR, RPR, The Woodlands,  
Texas, pursuant to the Federal Rules of Civil  
Procedure and the provisions stated on the record or  
attached hereto; that the deposition shall be read and  
signed.

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6 Ms. Kayla Brown

7 ALSO PRESENT:

8 Bert Cortez

9 Scott Miltenberger

10 Shelly Dalrymple

Nicolai Kryloff

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1 THE VIDEOGRAPHER: The time is 9:01 a.m.  
2 We're on the record.

3 MR. HOFFMAN: Before we begin, why don't  
4 we get the appearances? For Texas, this is Robert  
5 Hoffman and Mac Goldsberry. We also have Scott  
6 Miltenberger, our consultant, on the line.

7 How about for New Mexico?

8 MR. WECHSLER: Good morning. Jeff  
9 Wechsler for the State of New Mexico.

10 MR. HOFFMAN: United States?

11 MR. DUBOIS: James Dubois is on for the  
12 United States. Good morning, everyone. Oh, and Lee  
13 Leininger is also on.

14 MR. HOFFMAN: How about Colorado?

15 MR. WALLACE: Good morning. This is  
16 Chad Wallace for Colorado.

17 MR. HOFFMAN: How about for EP No. 1?

18 MS. O'BRIEN: Good morning. This is  
19 Maria O'Brien for El Paso County Water Improvement  
20 District No. 1.

21 MR. HOFFMAN: Is there anybody for EBID?

22 (No response.)

23 MR. HOFFMAN: City of El Paso?

24 (No response.)

25 MR. HOFFMAN: City of Las Cruces?

1 (No response.)

2 **MR. HOFFMAN:** Albuquerque Bernalillo  
3 Water -- County Water Utility Authority?

4 (No response.)

5 **MR. HOFFMAN:** Hudspeth?

6 (No response.)

7 **MR. HOFFMAN:** Pecan growers?

8 (No response.)

9 **MR. HOFFMAN:** New Mexico State  
10 University?

11 **MR. UTTON:** Good morning. This is John  
12 Utton.

13 **MR. HOFFMAN:** Nicolai, who's that?

14 **MR. KRYLOFF:** Hi, this is Nic Kryloff,  
15 expert historian for the United States.

16 **MR. HOFFMAN:** Okay. I'm sorry.

17 **MR. DUBOIS:** My apologies. I didn't  
18 notice Nic.

19 **MR. KRYLOFF:** No worries.

20 **MR. HOFFMAN:** Okay. Can the witness be  
21 sworn, please?

22 **THE REPORTER:** Yes.

23

24

25

1 JENNIFER STEVENS,  
2 having been first duly sworn, testified as follows:

3 E X A M I N A T I O N

4 BY MR. HOFFMAN:

5 Q. Will you state to your name for the record,  
6 please?

7 A. Jennifer Audrey Stevens, S-T-E-V-E-N-S.

8 Q. And, Ms. Stevens, how should I refer to you,  
9 Ms. Stevens, doctor, how would you like to be referred  
10 to?

11 A. Dr. Stevens is probably appropriate for the  
12 day.

13 Q. Okay. Thank you. I will do so. Are you in  
14 Boise now?

15 A. I am.

16 Q. How's the weather there?

17 A. It's very hot.

18 Q. Well, I'll bet you don't have Phoenix beaten,  
19 because that's where I am.

20 A. It is supposed to be triple digits this week  
21 so maybe not quite as high in the triple digits, but  
22 triple digits nevertheless.

23 Q. That's unpleasant.

24 A. Yes.

25 Q. Turn on the air-condition in the room, right?

1           A.     I see that.

2           Q.     Mr. Bryan is identified as the senior  
3 geologist and associate professor of geology at  
4 Harvard, and he carried out his study, quote, under  
5 the direction of C.V. Theis, end quote --

6           A.     I see that.

7           Q.     -- in the JIR 197. Do you have any reason to  
8 disagree with that?

9           A.     No.

10          Q.     And in there, it's stated, No. 1, "The  
11 extensive development of groundwater for irrigation  
12 would add no new water to the Upper Rio Grande Basin."  
13 Is that correct?

14          A.     That's what it states, yes.

15          Q.     Do you have any reason to disagree with that  
16 statement?

17          A.     I think it's an isolated -- are you -- are  
18 you done asking?

19          Q.     Yes. I'm sorry.

20          A.     So I think that I don't have any reason to  
21 doubt that that was in the report; however, there were  
22 many other things in the report that I think are  
23 equally important to recognize when we're talking  
24 about this particular issue, and that is that with  
25 regard to groundwater below Elephant Butte Dam, the



1 report also said that in Part 4 that there was meter  
2 data and Texas, in particular, Hill -- at the  
3 direction of Hill recommended and asked that the area  
4 south of Elephant Butte not actually be studied for  
5 this joint investigation. So while I don't doubt that  
6 this is what No. 1 says, and it comes directly from  
7 the joint investigation, I think that there are other  
8 things that are important to recognize that came from  
9 that same investigation and that same report.

10 Q. Well, let's understand what -- what you  
11 understand to be the state of groundwater development  
12 in 1938 below Elephant Butte. First, there was a  
13 problem identified in 20 -- in -- in -- in 1920s or  
14 19 -- actually, 1919 that there was waterlogging down  
15 below Elephant Butte because of over-irrigation,  
16 correct?

17 A. Yes.

18 Q. And that they had to build drains, correct?

19 A. Yes.

20 Q. And that the drains were necessary in order  
21 to continue to irrigate the lands that were meant to  
22 be irrigated pursuant to the project, correct?

23 A. Yes.

24 Q. And, in fact, under the JIR, that drain water  
25 that appeared in the drains was part of the project

1 supply, correct?

2 A. Yes. The return water was part of the  
3 project supply.

4 Q. So that the down -- as you went downstream  
5 from the dam, first users were using mostly almost  
6 primarily water released from the dam. As you went  
7 downstream, each user was using less water from the  
8 dam and more water from return flow, correct?

9 A. Yes. That is right.

10 Q. All the way down through El Paso, is that  
11 right?

12 A. It is true, yes.

13 Q. And that was --

14 A. Return flows were used multiple times.

15 Q. Okay. And that was the state of affairs in  
16 1938, correct?

17 A. Yes. It was.

18 Q. And -- and, in fact, there were very few  
19 wells in Elephant Butte Irrigation District as of  
20 1938, correct?

21 A. That's right. They were displaced when  
22 surface water became readily available when the  
23 project went in.

24 Q. In fact, I think I saw in one of the -- your  
25 documents that you attached as a supporting document

1 to your rebuttal report that at least as of 1937, the  
2 Bureau of Reclamation reported that there were only 37  
3 wells -- I'm sorry -- 1947, that there was only 37  
4 wells in Elephant Butte Irrigation District,  
5 irrigation wells that is; is that right?

6 A. Yes. That's right. And that was because,  
7 again, the project supply starting when the dam became  
8 operational supplanted the need for the prior use of  
9 wells in that area.

10 Q. Okay. The second statement on Page 12 from  
11 the JIR is that, quote, "Recharge of groundwater  
12 basins would necessarily involve a draft on surface  
13 water supplies, which are now utilized otherwise." Do  
14 you disagree with that statement?

15 A. I don't disagree that the report says that.

16 Q. And the report also said -- the next No.  
17 3, "The chief element to be considered in such  
18 development of groundwater would be the redistribution  
19 of availability and use -- availability and use of  
20 present supplies and the resulting effect on the water  
21 supply of lower major units, i.e. Rio Grande project  
22 and beyond Fort Quitman." So that would include El  
23 Paso No. 1?

24 A. What would include El Paso No. 1, the lower  
25 major units?

1           **Q.     Yes.**

2           A.     Yes.  But, of course, they're talking here  
3     about development of groundwater above Elephant Butte.  
4     And, in fact, if we are going to discuss these quotes,  
5     it probably would make more sense to bring up the  
6     report itself so we could see the context of it as  
7     opposed to just the quotes themselves here.

8           **Q.     You don't think this applies to groundwater**  
9     **development below Elephant Butte; is that correct?**

10          A.     Again, I'd want to look at the document  
11     itself as opposed to just the quote taken out of this  
12     report because I don't recall.

13          **Q.     So you don't recall one way or the other,**  
14     **looking at this document today, as to -- this quote**  
15     **today as to whether or not it applied throughout the**  
16     **basin?**

17                   **MR. WECHSLER:**  Object to form.

18          **Q.     (BY MR. HOFFMAN)  Correct?**

19          A.     Yes.  That's right.  And I think, again,  
20     because you -- if you look at the rest of the report,  
21     that says very clearly, and we know from all the  
22     documents and all the studies that led up to the  
23     publication of the joint investigation report, we know  
24     there was virtually no work done south of Elephant  
25     Butte.  So the majority of things that are discussed

1 regarding groundwater throughout the Rio Grande joint  
2 investigation report relate to the knowledge and  
3 understanding of groundwater in the Middle Rio Grande  
4 Valley and in Colorado.

5 Q. Well, the alluvium in the Middle Rio Grande  
6 Valley is no different from the alluvium down below  
7 Elephant Butte, is it?

8 MR. WECHSLER: Objection; foundation.

9 A. I do not know.

10 Q. (BY MR. HOFFMAN) So then because you don't  
11 know, you don't know whether or not if this  
12 statement -- I'll leave that alone. I'll just not go  
13 there. Okay.

14 MR. HOFFMAN: Can we take a 15-minute  
15 break right now? Is that okay?

16 THE WITNESS: Sure.

17 MR. HOFFMAN: Okay.

18 THE VIDEOGRAPHER: The time is 10:13  
19 a.m. We're off the record.

20 (Break.)

21 THE VIDEOGRAPHER: The time is 10:30  
22 a.m. We're on the record.

23 MR. HOFFMAN: Okay. Dr. Stevens, let's  
24 mark another exhibit that would be identified as  
25 19350913 report of the Rio Grande Board of Review.

1 the people in the Middle Rio Grande the chief concern  
2 of the negotiating commissioners for New Mexico?

3 A. Your question says wasn't that his concern."  
4 I don't know what you're referring to.

5 Q. Well, it says that you -- you testified that  
6 there was a concern that the Middle Rio Grande Project  
7 and then reclamation of lands in that area, they were  
8 concerned that the farmers in the district were  
9 concerned. I think it meant at protecting their --  
10 their water supply, so that's the reason he was  
11 active. And -- and my question is wasn't that the  
12 issue that was mainly the concern -- chiefly the  
13 concern of the Compact commissioner for New Mexico at  
14 the time?

15 A. No, I wouldn't agree with that.

16 Q. Who was the Compact commissioner,  
17 Mr. McClure?

18 A. Yes. Thomas McClure.

19 Q. And he wrote a letter objecting to the  
20 initial Compact commissioner's report; is that right?

21 A. He did. He was concerned, of course, that  
22 the Middle Rio Grande users would hold up ratification  
23 or somehow other delay or -- or sort of derail  
24 negotiations and so, of course, that was -- those were  
25 some of the water users that New Mexico's were -- had

1 to protect, but it certainly wasn't the only ones.

2 Q. And that letter chiefly objected to the  
3 800,000 acre-foot normal release figure, didn't it, in  
4 the engineering advisor's report?

5 A. Do you have the letter handy? I -- I don't  
6 have that bit of recall.

7 Q. I'm sure it's part of this document. I can  
8 locate it. I'll go back to it later maybe. I believe  
9 it's part of this document.

10 Let's go back in a minute to your initial  
11 report, which is Exhibit No. -- I believe No. 2. I'm  
12 sorry. It's No. 1, I believe. Page 8 of that  
13 document. Yes. Scroll down a bit. Right there.

14 The three bullet points under, "Methodology  
15 and materials consulted," it says you were tasked with  
16 exploring the following overarching questions. My  
17 question to you is who formulated those questions for  
18 you?

19 A. I think it was a joint effort between me and  
20 the team at the attorney general's office, if I  
21 remember correctly. At the time I was working with  
22 Sarah Bond, and I believe that together, we came up  
23 with these questions or something approximating these  
24 questions, as we discussed the -- the state of  
25 litigation and what was necessary from a historical

1 standpoint.

2 Q. Okay. Thank you. I'd like to sort of go  
3 over a little bit some of the -- your supporting  
4 documents for your opinions in your rebuttal report.  
5 The first document I'd like to look at is JS259.

6 (Exhibit No. 8 was marked.)

7 Q. (BY MR. HOFFMAN) What is this document?

8 A. If you could scroll down so I could see the  
9 document, please.

10 MR. HOFFMAN: Yeah, scroll down to the  
11 first page. Can you right that, please?

12 A. It appears to be a letter to Mr. Slichter.

13 Q. From whom?

14 A. If you go to the end, I can see who the  
15 author of the letter was. B.M. Hall, the supervising  
16 engineer on the project.

17 Q. So this was the letter that instructed  
18 Mr. Slichter on what he was supposed to be  
19 investigating with respect to the water resources in  
20 the Mesilla Valley?

21 A. It appears to be, yes. Can you scroll back  
22 up one page, please? Thank you. Yes.

23 Q. Says, "I have been expecting to hear from you  
24 and am anxious for you to make investigation in the  
25 Rio Grande Valley, especially in the part known as



1 Mesilla Valley from old Fort Selden above Las Cruces  
2 down to El Paso." That's basically the area below  
3 Elephant Butte, correct?

4 A. Yes.

5 Q. Then what he wanted to know is listed later  
6 in the letter, at least on the first page. No.

7 1, "How much water per square mile can be pumped  
8 continuously from the ground at the lowest season  
9 without lowering the water plane? No. 2, what are the  
10 sources of supply of the underground water?" And  
11 then, "Does the water all come down the river or is  
12 there a large quantity coming from beneath the mesa  
13 country on each side?" And then finally -- well,  
14 third, "If there is a continuous underflow along the  
15 river bed, what is the volume in cubic feet per second  
16 during the time that the river is dry, so far as the  
17 surface flow is concerned?" So that's -- those were  
18 the questions he was supposed to answer, correct?

19 A. Yes. That's what it -- that's what Mr. Hall  
20 is asking him to examine.

21 Q. Okay. Let's go to the report and see what he  
22 came up with. That would be -- let me find it. 250.  
23 JS250. May I have that marked as an exhibit, please?

24 (Exhibit No. 9 was marked.)

25 Q. (BY MR. HOFFMAN) This is Exhibit 9. Do you

1 recognize this exhibit?

2 A. Yes.

3 Q. This is one of the supporting documents that  
4 you provided with your rebuttal expert report,  
5 correct?

6 A. Yes. I said yes.

7 Q. Yes. Okay. Now, I noticed when I went  
8 through these documents that there was a number of --  
9 almost all of them had highlighting in orange, I think  
10 it was, throughout the document, and my question to  
11 you is: Did you make those yourself or did your  
12 supporting people make those highlighting?

13 A. I made them? I have a bad habit of using  
14 that tool on Adobe.

15 Q. So all the highlighting is yours, correct?

16 A. Yes.

17 Q. Chapter 3 of this document is  
18 entitled, "Examination of Groundwater Supplies in the  
19 Mesilla Valley," correct?

20 A. Yes.

21 Q. Chapter 1 and Chapter 2 dealt with the  
22 waters -- basically the narrows or the Lower Mesilla  
23 Valley?

24 A. Yes.

25 Q. And it -- the Chapter 3, I don't know what

1 page it is of the report, it's probably Page 15 or so.  
2 There you go. Now, you highlighted this portion. It  
3 says, "Owing to the frequent shortage in the river  
4 supply a number of pumping plants have been installed  
5 for the purpose of obtaining groundwater for  
6 irrigation." That's sort of the premise of the  
7 report, right?

8 A. I don't know that I'd characterize it that  
9 way. And for the record, my highlights probably  
10 sometimes mean something and sometimes don't so just  
11 to put that on the record, it's, again, sort of a bad  
12 habit on my part of just sort of staying engaged in --  
13 in the reading, but whether or not this is the premise  
14 of it, I'm not sure. It probably is certainly one of  
15 them.

16 Q. And then later on in that paragraph, you've  
17 underlined -- scroll down a bit, please -- right  
18 there -- "For that reason, it has become important to  
19 have accurate information of the source of groundwater  
20 supply in this part of the Rio Grande Valley and to  
21 determine the amount available for such use." So that  
22 's what he's doing. In response to Exhibit No. 8, I  
23 believe, right? You have to answer audibly.

24 A. Yes. That's what he's written here.

25 Q. And then, also, you underlined, I believe,

1 continue on the next paragraph, "The rainfall upon the  
2 catchment northeast of the valley is very slight and  
3 the runoff is corresponding below. Does not seem  
4 possible that the ground waters which are used for  
5 irrigation could originate very largely in the  
6 rainfall upon the neighboring Mesa and the foothills  
7 and upon the slopes of the Oregon Mountains." Did I  
8 read that correctly?

9 A. Yes.

10 Q. Then he talked about the wells that he  
11 drilled later on and underlined stuff there. On that  
12 page that we're looking at right now -- scroll down a  
13 bit, please -- there's an arrow in the middle of the  
14 page. Do you see that arrow?

15 A. Yes.

16 Q. Do you know what that arrow is intended to  
17 indicate?

18 A. I don't. Not without -- no, not without  
19 being able to read this again more thoroughly and  
20 looking more closely, I don't know off the top of my  
21 head.

22 Q. Okay. And then he drilled some test wells,  
23 the next page, for the purpose of determining a source  
24 of the groundwater. And then it says on Page 25, and  
25 you didn't highlight this, but it -- in the middle of

1 the first paragraph, it says, "It is evident from  
2 these cross sections that the groundwater must flow in  
3 the general direction of the river valley, in the  
4 direction of maximum slope of the water plane as  
5 showed and configured by the large arrow." That was  
6 the arrow we're looking at, right?

7 A. Probably. I don't know.

8 Q. Well, the --

9 A. I'll take your word for it.

10 Q. Well, the map is -- Figure 8 is the map with  
11 that arrow on it, and I see no other arrow on it.  
12 Okay. "The arrows should, therefore, indicate the  
13 directional flow of the groundwater and the gradient  
14 of the water plane is 4.64 feet per mile is very  
15 moderate." Do you see that?

16 A. I do.

17 Q. And then on the next page, Page 26,  
18 there's -- you did highlight this, "The direction of  
19 movement of the water in the gravel was therefore  
20 undoubtedly downstream, even during times of flood."  
21 Then further on, it says, "The test gradient of 4.64  
22 feet to the mile was not materially affected by the  
23 floods." That's what I understood it to be saying.  
24 Did you understand it to be saying that same thing,  
25 that the flood didn't affect the gradient of the

1 water?

2 A. If I could, I'd prefer to read the entire  
3 paragraph so that I can --

4 Q. Based on what I'm representing to you --

5 THE WITNESS: So, Kayla, if you could  
6 start one page earlier so I could read the whole thing  
7 in context. Thank you. Okay. And the next page.

8 A. Yes. I would agree with your statement.

9 Q. (BY MR. HOFFMAN) Okay. Let's turn to Page  
10 27. Continue down. There, you've highlighted this  
11 paragraph that begins, "The observation of the test  
12 wells show that the ground waters in the Mesilla  
13 Valley originate in the floodwaters of the river."

14 That's what he concluded, correct?

15 A. That's right.

16 Q. Okay. How about the next page, 28. Here,  
17 you've highlighted -- trying to determine the amount  
18 of groundwater available, correct?

19 A. Yes.

20 Q. The response to what Mr. Hall wanted,  
21 correct?

22 A. Yes.

23 Q. That was one of the things he wanted in  
24 Exhibit 8, right?

25 A. That's right.

1 Q. So he's got a table that you have highlighted  
2 about, and then there's a statement at the end of the  
3 paragraph that you've also highlighted. "Any greater  
4 rate of pumping would have a tendency to lower the  
5 water plane below its initial value and make a draft  
6 upon the permanent supply stored in the gravels." I  
7 believe -- it's not -- it doesn't show up here, but  
8 you have a question mark there in the original that  
9 was in your -- that was produced to us as a supporting  
10 document, and you state in that comment, "I think this  
11 is wrong corrected by later studies." Do you recall  
12 that comment?

13 A. Not -- not specifically, no.

14 Q. And so you wouldn't at this point know why  
15 you thought that was wrong?

16 A. Well, if I wrote that as a comment, it's  
17 because I had read labor studies and was in the middle  
18 of reviewing labor studies that did, in fact, prove  
19 that to be incorrect.

20 Q. So what -- can you understand from -- from  
21 what's here and what's in the chart on the next page  
22 how much water he's talking about that could be pumped  
23 so that the limit that any greater rate of pumping  
24 would have a tendency to lower the water plane below  
25 its initial value and make a draft upon the permanent

1 supply as stored in the gravels, that statement that  
2 you disagreed with, do you know what the level of  
3 pumping he's talking about?

4 A. No. I'm not a hydrologist. I didn't attempt  
5 to quantify what that was, and I -- and I wouldn't be  
6 able to.

7 Q. Do you know how many gallons there are in a  
8 cubic foot -- sorry -- how many cubic feet of water  
9 there is on an acre-foot?

10 A. I believe the calculation is 1.9 acre-feet  
11 per every cubic foot per second in a year, if I  
12 remember correctly, but I don't have that -- I could  
13 be wrong about that. I don't have it all committed to  
14 memory.

15 Q. Did you ever run those calculations to see --

16 A. No.

17 Q. -- what, in fact, he's saying is the amount  
18 of water is there? You didn't?

19 A. No.

20 Q. Okay. The rest of the report has to do with  
21 a bunch of wells and stuff that he -- that he observed  
22 and how they were constructed, right?

23 A. I -- my -- I would have to look back over it,  
24 but I -- I think that there were only those seven  
25 pages that were relevant to the question of supply and



1 volume in the Mesilla Valley, if I remember correctly.

2 Q. Okay. The next report, Document No. 263,  
3 JS263. Exhibit 10.

4 (Exhibit No. 10 was marked.)

5 Q. (BY MR. HOFFMAN) Do you recognize this  
6 report?

7 A. Yes.

8 Q. This is a report by Willis T. Lee in 1907, I  
9 guess?

10 A. Yes.

11 Q. Right?

12 A. Yes.

13 Q. And it's designated as Water Supply  
14 Irrigation Paper No. 188, right?

15 A. Yes.

16 Q. And Series B, Descriptive Geology, and Series  
17 O, Underground Waters. What does that mean in terms  
18 of the USGS? What are those?

19 A. Sorry. Are you done with your question?

20 Q. Yeah. I don't know what those mean. What  
21 does that mean?

22 A. So the -- yeah, the -- the agency categorized  
23 the reports that were done by their staff and/or  
24 professionals into different series so that people  
25 would have a sense of what was inside the report, and

1 also -- well, that's basically it. It was just a  
2 category that these fit into.

3 Q. So this is a -- not only a geology --  
4 descriptive geology series, but a water -- underground  
5 water series according to --

6 A. Yes. It fit into those categories broadly,  
7 yes.

8 Q. So the geography of the area under study is  
9 described in -- starting on Page 8, according to  
10 the --

11 A. You mean geology?

12 Q. Let's look at the table of contents first  
13 before we go all the way through it. The geography is  
14 on Page 8, and it goes down through every part of it  
15 all the way down to the El Paso Valley, right?

16 A. Yes.

17 Q. And then the geology is described starting on  
18 Page 16, and then on Page 25 reservoir sites are  
19 discussed?

20 A. Yes.

21 Q. And finally the water supply, Page 30,  
22 correct?

23 A. That's right.

24 Q. So that's what we're interested in, so let's  
25 turn to Page 30. This talks about surface supplies,

1                   IN THE SUPREME COURT OF THE UNITED STATES  
 2                   BEFORE THE OFFICE OF THE SPECIAL MASTER  
                   HON. MICHAEL J. MELLOY

3  
 4       STATE OF TEXAS                   )  
   )  
 5               Plaintiff,                )  
   )       Original Action Case  
 6       VS.                                )       No. 220141  
   )       (Original 141)  
 7       STATE OF NEW MEXICO,            )  
       and STATE OF COLORADO,         )  
 8    )  
              Defendants.                 )

9  
 10  
 11       THE STATE OF TEXAS :  
       COUNTY OF HARRIS :

12       I, HEATHER L. GARZA, a Certified Shorthand  
 13       Reporter in and for the State of Texas, do hereby  
 14       certify that the facts as stated by me in the caption  
 15       hereto are true; that the above and foregoing answers  
 16       of the witness, JENNIFER STEVENS, to the  
 17       interrogatories as indicated were made before me by  
 18       the said witness after being first remotely duly sworn  
 19       to testify the truth, and same were reduced to  
 20       typewriting under my direction; that the above and  
 21       foregoing deposition as set forth in typewriting is a  
 22       full, true, and correct transcript of the proceedings  
 23       had at the time of taking of said deposition.

24       I further certify that I am not, in any  
 25       capacity, a regular employee of the party in whose

1 behalf this deposition is taken, nor in the regular  
2 employ of this attorney; and I certify that I am not  
3 interested in the cause, nor of kin or counsel to  
4 either of the parties.

5  
6 That the amount of time used by each party at  
7 the deposition is as follows:

8 MR. HOFFMAN - 02:56:39

MR. WECHSLER - 00:00:00

9 MR. DUBOIS - 00:23:27

MR. WALLACE - 00:00:00

10 MS. O'BRIEN - 00:00:00

11  
12 GIVEN UNDER MY HAND AND SEAL OF OFFICE,  
13 this, the 10th day of August, 2020.



14 *Heather L. Garza*

HEATHER L. GARZA, CSR, RPR, CRR

15 Certification No.: 8262

Expiration Date: 04-30-22

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## WITNESS CORRECTIONS AND SIGNATURE

Please indicate changes on this sheet of paper,  
giving the change, page number, line number and reason  
for the change. Please sign each page of changes.

PAGE/LINE	CORRECTION	REASON FOR CHANGE
14/3	"assistants"	"assistance" is wrong
22/19	"wasnt"	instead of "was on"
38/21	"engineering"	instead of "hearing"
43/1	"meager"	instead of "meter"
64/17+18	"later"	instead of "later"
78/4	"Adviser"	instead of "odd visor"
92/10	Strike "and"	

JENNIFER STEVENS

## S I G N A T U R E   O F   W I T N E S S

I, JENNIFER STEVENS, solemnly swear or affirm  
under the pains and penalties of perjury that the  
foregoing pages contain a true and correct transcript  
of the testimony given by me at the time and place  
stated with the corrections, if any, and the reasons  
therefor noted on the foregoing correction page(s).



JENNIFER STEVENS

Job No. 63583