

No. 141, Original

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

◆—————
**STATE OF NEW MEXICO'S MOTION IN LIMINE TO LIMIT
THE SCOPE OF TESTIMONY OF DR. WILLIAM HUTCHISON**

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MOTION

COMES NOW the State of New Mexico (“New Mexico”) and respectfully moves *in limine* to limit the scope of Texas expert Dr. William Hutchison’s testimony to his previously disclosed opinions, pursuant to Rules 26 and 37 of the Federal Rules of Civil Procedure.

GROUND FOR THE MOTION

In contravention of Federal Rule of Civil Procedure 26 and the Case Management Plan of September 6, 2018, as amended (“CMP”), Texas seeks to expand the scope of Dr. Hutchison’s testimony into the following *new areas* that Texas *never previously disclosed*:

- (1) “the impact of [Texas and Mexico] groundwater pumping in the Hueco Bolson on New Mexico”;
- (2) “his review of the New Mexico groundwater and ILRGM models”; and
- (3) “further analysis of the technical work undertaken by [the United States’ hydrogeology expert] Ms. Moran.”

These expanded areas of testimony are contained in Texas’s recent Witness List. *Id. See* Exhibit A, *State of Texas’s Witness List Pursuant to Section III of the April 9, 2021 Trial Management Order* at 8 (June 30, 2021) (“*Texas Witness List*”) (excerpt). This is the second time Texas has attempted to expand the scope of Dr. Hutchison’s expertise and offer new opinions following the close of discovery in this case. As New Mexico documented in its pending Objections to and Motion to Strike Texas’s Late-Filed Expert Opinions (Feb. 12, 2021) (“*NM Motion to Strike*”), Texas previously attempted to add new opinions for Dr. Hutchison on New Mexico’s Integrated Model and conjunctive use in Dr. Hutchison’s declaration submitted in support of Texas’s dispositive motion. *See Exhibit B, Declaration of Dr. William Hutchison* (Oct. 29, 2020). Those declaration opinions were untimely new opinions, never previously disclosed, that must be struck.

Now, in describing new and expanded areas of testimony for Dr. Hutchison in the Texas Witness List this late in the case and after the close of discovery, Texas again seeks to circumvent the CMP, the Federal Rules of Civil Procedure, and the required disclosure of supporting data and information that each expert must make. Texas's sole purpose for these new or expanded opinions is to attempt to plug holes in its case and bolster areas where it has striking weaknesses. Disclosing such opinions for the first time at trial is manifestly unfair and highly prejudicial to New Mexico. Dr. Hutchison must be precluded from offering any such new opinions at trial. Specifically, the scope of Dr. Hutchison's opinions must be limited to the areas disclosed in his expert reports, and no more.

BACKGROUND

1. On September 6, 2018, the Special Master adopted a CMP. The CMP, as subsequently amended, set deadlines for the disclosure of Texas's expert reports, and any final supplemental reports or disclosures:

May 31, 2019: Texas's expert reports and disclosures;

December 30, 2019: Texas's rebuttal expert reports and disclosures; and

September 30, 2020: Final supplemental expert reports and disclosures, and amendments.

2. The parties agreed and the Special Master ordered that the following must be provided with the disclosure of expert reports:

In addition to the disclosures required by Rule 26(a)(2), expert disclosures shall include an executable electronic version of any computational model, if one is prepared by the Party, including all input and output files, relied upon by the expert in forming his or her opinions. Additionally, each Party must provide engineering and other technical information in its native electronic file format whenever the native format contains formulae, macros, or other programming that is relevant to disputed issues in this case. By way of example and not limitation, this includes Microsoft Excel or other spreadsheet documents that include macros or formulas. Since expert disclosures and modeling files will be very large in size, the Parties will confer and agree in writing on further details defining the procedure, format and location for serving electronic expert

disclosures.

CMP (Sep. 2018), § 6.2.2.

3. On May 31, 2019, Texas made its expert disclosures and disclosed an original expert report by Dr. Hutchison. Exhibit C, *Expert Report of William R. Hutchison* (May 31, 2019) (“*Hutchison Expert Report*”) (excerpts). In his original report, Dr. Hutchison disclosed his Rincon-Mesilla groundwater model (“Texas Model”), provided supporting files on model inputs and outputs, and opined on pumping impacts using that model. *Id.* at 2, 3, 13, 18. Dr. Hutchison’s report was limited to answering specific questions that Texas’s counsel posed. New Mexico deposed Dr. Hutchison on the contents of his expert report in September and October of 2019.
4. Texas filed its rebuttal expert reports on December 30, 2019, including a rebuttal report from Dr. Hutchison. Exhibit D, *Rebuttal Expert Report of William R. Hutchison* (Dec. 23, 2019) (“*Hutchison Rebuttal Report*”) (excerpts). In his rebuttal report, Dr. Hutchison opined on a specific question presented to him by counsel:

Counsel for the State of Texas asked me to review the groundwater flow model of the Hueco Bolson submitted by the State of New Mexico (Spalding and Morrissey, 2019) and asked the following question:

Is the new Spalding and Morrissey (2019) model of the Hueco Bolson a better model than the existing USGS model of the Hueco Bolson (Heywood and Yager, 2003) to address issues associated with the Lawsuit?

Id. at 1. Dr. Hutchison’s Rebuttal report comprised six pages and was narrowly focused on his opinions comparing the New Mexico Hueco Bolson groundwater flow model to an older USGS model developed to evaluate municipal pumping. *See id.* Dr. Hutchison’s rebuttal report **did not** mention or analyze New Mexico’s Integrated Model, even though New Mexico had disclosed it to Texas two months earlier.

5. In his second deposition, Dr. Hutchison confirmed that up to that time Texas had only asked

him to consider New Mexico's groundwater models. Exhibit E, *Deposition of Dr. William Hutchison, Vol. 3* at 17:22-18:21, 20:16-21:18 (May 28, 2020) ("Hutchison Depo. Tr. Day 3") (excerpts). He disclaimed reviewing or running New Mexico's Integrated Model and stated that another Texas expert, Mr. Shane Coors, was performing the analysis of the Integrated Model. *Id.* at 18:17-19:4. Texas did not file Rule 26(e) supplemental disclosures to supplement the opinions Dr. Hutchison made in his original report or rebuttal report.

6. On November 5, 2020, the parties filed partial summary judgment motions. In Texas's Appendix of Evidence to its partial summary judgment motion, Texas filed the Hutchison Declaration. Hutchison's Declaration contained opinions on New Mexico's Integrated Model and conjunctive use that Texas had never previously disclosed.
7. New Mexico objected to these new opinions by filing the NM Motion to Strike Dr. Hutchison's new opinions relating to New Mexico's Integrated Model and conjunctive use on February 12, 2021. That Motion is currently pending before the Special Master.¹
8. On June 30, 2021, Texas filed its Witness List, identifying each lay and expert witness that Texas will or may call at trial. *See generally Texas Witness List.*² The list includes a brief description of the testimony each witness is expected to offer. *Id.* The description of Dr. Hutchison's testimony includes familiar topics such as the groundwater-surface water interaction in the Rincon and Mesilla Valleys, the impact of groundwater pumping in the Rincon and Mesilla Valleys on Rio Grande flows, and the simulations he has run with his Texas groundwater model. *Id.* at 8. These are all areas encompassed within Dr. Hutchison's reports. *See Hutchison Expert Report; Hutchison Rebuttal Report.* However, the testimony

¹ New Mexico herein renews its request that the Special Master rule on the pending motion and hold that Dr. Hutchison's declaration be struck.

² On July 2, 2021, Texas Amended its Witness list by adding one additional witness unrelated to this motion.

description also includes three more topics that are beyond the scope of his reports: (1) “the impact of groundwater pumping in the Hueco Bolson on New Mexico,” (2) “opinions formed as a result of his review of the New Mexico groundwater and ILRGM models,” and (3) the “analysis of the technical work undertaken by Ms. Moran [the United States modeling expert].”. *See Texas Witness List* at 8.

9. Dr. Hutchison’s original expert report focuses solely on Texas’s Rincon and Mesilla Valley groundwater model development and various pumping scenarios that he evaluated.
10. Dr. Hutchison’s rebuttal report then solely evaluated the New Mexico Hueco groundwater model as compared to a USGS model, and similar conclusions you can derive from both, but did not provide *any opinions* on the impact on New Mexico from Texas and Mexico groundwater pumping in the Hueco basin. During Dr. Hutchison’s deposition, he confirmed that the opinions in his rebuttal report “would be limited only to the issue of whatever groundwater/surface water interactions and the effect of surface water flows in the Hueco solely, that’s correct.” *Hutchison Depo. Tr. Day 3* at 28:20-23.
11. Dr. Hutchison’s rebuttal report also does not mention, much less analyze, the modeling analysis of Ms. Moran. *See generally Hutchison Rebuttal Report.* Ms. Moran is the United States’ disclosed modeling expert in this case. *See Exhibit F, United States of America’s Disclosure of Expert Witnesses* (May 31, 2019).

LEGAL STANDARD

A party may use a motion *in limine* to exclude inadmissible or prejudicial evidence before it is actually introduced at trial. *See Luce v. United States*, 469 U.S. 38, 40 n.2 (1984). “[A] motion in limine is an important tool available to the trial judge to ensure the expeditious and evenhanded management of the trial proceedings.” *Jonasson v. Lutheran Child and Family Services*, 115 F.3d

436,440 (7th Cir. 1997).

Rule 26 requires that a party’s expert witness disclose, in a written report, “a complete statement of all opinions the witness will express” at trial, and the basis and reasons for them. Fed. R. Civ. P. 26(a)(2)(B)(i). Rule 26 further provides that these disclosures be made at the times directed by the court. *See* Fed. R. Civ. P. 26(a)(2)(D). The purpose of these requirements “is to provide ‘information regarding expert testimony sufficiently in advance of trial [so] that opposing parties have a reasonable opportunity to prepare for effective cross examination and perhaps arrange for expert testimony from other witnesses.’” *Yates-Williams v. Nihum*, 268 F.R.D. 566, 570 (S.D. Tex. 2010) (quoting Fed. R. Civ. P. 26 Committee Note (1993 Amendments)).

Rule 37 provides that if a party fails to provide the information required by Rule 26(a), “the party is not allowed to use that information or witness to supply evidence on a motion, at a hearing, or at a trial, unless the failure was substantially justified or harmless.” Fed. R. Civ. P. 37(c)(1); *see also Yates-Williams*, 268 F.R.D. at 570 (“[w]hen a party fails to comply with the requirements of Rule 26, the court may exclude the witness or report as evidence at trial, at a hearing, or on a motion, and may ‘impose other appropriate sanctions.’”) (quoting Fed. R. Civ. P. 37(c)(1)). “[E]xperts are not free to … continually supplement their opinions. If that were the case, there would never be any closure to expert discovery, and parties would need to depose the same expert multiple times.” *Sandata Techs., Inc. v. Infocrossing, Inc.*, Nos. 05 Civ. 09546(LMM)(THK), 06 Civ. 01896(LMM)(THK), 2007 U.S. Dist. LEXIS 85176 *20 (S.D.N.Y. Nov. 16, 2007). Failure to impose the Rule 37 sanction “would create a system where preliminary reports could be followed by supplementary reports and there would be no finality to expert reports, [which] would surely circumvent the full disclosure requirement implicit in Rule 26.” *Cheung Jacky Chik-Kin v. Axis Surplus Ins. Co.*, 2015 U.S. Dist. LEXIS 73519 *3 (N.D. Tex. Jan. 21, 2015) (quoting *Beller ex rel. Beller v. United States*, 221 F.R.D. 689, 695 (D.N.M. 2003)).

In evaluating whether a violation of Rule 26 is harmless, the court should consider: (1) the importance of the evidence; (2) the prejudice to the opposing party of including the evidence; (3) the possibility for curing such prejudice by granting a continuance; and (4) the explanation for the party's failure to disclose. *Tex. A & M Rsch. Found. v. Magna Transp., Inc.*, 338 F.3d 394, 402 (5th Cir. 2003). The burden is on the party who failed to disclose the information to prove that such failure is harmless. *Hearing Components, Inc. v. Shure, Inc.*, 2008 U.S. Dist. LEXIS 121434 *4-5 (E.D. Tex. Dec. 16, 2008).

ARGUMENT

I. Dr. Hutchison's New Opinions Must Be Barred from Trial.

There is a clear CMP for this case. Final supplemental expert reports and disclosures were due by September 30, 2020. Without warning, on June 30, 2021, Texas served on New Mexico what is effectively a new scope of testimony from Dr. Hutchison, without the required associated discovery. Dr. Hutchison never previously offered any opinions on the three new topics identified in the Texas Witness List. Therefore, *any* opinions he may offer on these topics at trial will be new and untimely. There is absolutely no basis to offer new expert opinions at trial, especially without associated discovery. In attempting to expand the scope of Dr. Hutchison's opinions in its Witness List, Texas attempts to open the door to Dr. Hutchison offering previously undisclosed and untested opinions at trial. Allowing this would circumvent the provisions of the CMP and the Federal Rules. For the reasons set out below, the Special Master must limit the scope of Dr. Hutchison's expert opinions to those properly disclosed during discovery.

A. Importance of Dr. Hutchison's New Opinions to Texas.

As with Dr. Hutchison's new opinions in his late-filed declaration, *see* NM Motion to Strike, the expanded scope for Dr. Hutchison in the Texas Witness List has been introduced

presumably to “fill holes” in Texas’s case. *United States v. City of New York*, 637 F. Supp. 2d 77, 107 (E.D.N.Y. 2009). This is no reason to permit Texas to offer the late-disclosed opinions at trial. Importantly, Texas has known about the relevant aspects of New Mexico’s case (e.g., the Integrated Model) on which Dr. Hutchison now intends to offer new opinions for over a year, and Texas chose not to develop testimony from Dr. Hutchison on these topics. This is not a case in which Texas should have leeway to respond to newly discovered facts or opinions. Rather, if these opinions were important to Texas’s case, Texas had an obligation to develop and disclose them in accord with the schedule in the CMP.

B. New Mexico Would Be Unfairly Prejudiced at Trial if Dr. Hutchison Offered These New Opinions.

Allowing Dr. Hutchison to offer new opinions at trial based on his expanded scope of testimony would be highly prejudicial to New Mexico. Expert rebuttal disclosures from Texas were due a year-and-a-half ago, on December 30, 2019. This case has involved extensive and intensive expert discovery, with Texas, New Mexico, and the United States each disclosing numerous experts and those experts being the subject of numerous depositions. Now, this case has moved well past the discovery phase with trial soon commencing on numerous and complex issues. *See e.g., Greenwood v. Henkel*, No. CIV-08-378-F, 2009 WL 8711142, at *4 (W.D. Okla., June 25, 2009) (stating that once a case has moved past discovery to the adjudicatory stage, “litigants are entitled to assume that … they are not going to be subjected to the delay and expense which result from another trip through the discovery stage”). Allowing Texas to expand the scope of Dr. Hutchison’s expert opinions at this point severely hampers New Mexico’s ability to prepare for trial. Without full discovery into these new opinions, New Mexico cannot sufficiently explore the basis and import of these opinions.

As with Texas’s tardy disclosures in the declarations submitted with its Dispositive Motion,

Dr. Hutchison’s expanded scope is harmful and highly prejudicial to New Mexico.

C. Trial Is Nearly Here; A Cure by Continuance Is Not Possible.

There is no time for a continuance in the current case schedule, and Texas should not be rewarded for its untimely disclosures. *See e.g., Turner v. Carbett*, No. 2:17-CV-385, 2019 U.S. Dist. LEXIS 7916, at *22-26 (S.D. Tex. Jan. 16, 2019) (“[g]iving the parties a continuance so that Plaintiff could cure his expert designation would improperly reward him for his untimely and inadequate disclosure.”); *see also Morritt v. Stryker Corp.*, 2011 U.S. Dist. LEXIS 98218 at *24 (E.D.N.Y. Sept. 1, 2011) (“[T]he fact that discovery is closed and this case has been pending for over four years weighs strongly against the possibility of a continuance.”) (internal quotation omitted). With trial nearly here, New Mexico should not be forced to divert its limited resources to conduct additional discovery.

D. Texas Offers No Explanation for Its Late Disclosure.

Texas has offered no explanation for its late attempt to expand the scope of Dr. Hutchison’s testimony. Texas has had extensive information on all the new topics identified for Dr. Hutchison in its Witness List for more than a year-and-a-half. The only reasonable deduction is that Texas wishes to have Dr. Hutchison offer opinions on these subjects for the first time at trial in an impermissible attempt to fill a gap in its previous expert reports. *See Advanced Analytics, Inc. v. Citigroup Global Mkts., Inc.*, 301 F.R.D. 47, 51 (S.D.N.Y. 2014) (precluding an expert declaration containing new opinions, not within the scope of the expert’s “prior submissions” that was “based entirely on materials that have been in [the party’s] possession for well over a year,” where the declaration “was an attempt to articulate a wholly new and complex approach that [wa]s unquestionably designed to fill a significant and logical gap in [the expert’s] past reports.”)

(internal quotations and citations omitted).³ For the aforesaid reasons, each of these factors weighs in favor of limiting the scope of Dr. Hutchison’s testimony to the topics covered in his timely expert disclosures.

CONCLUSION

For the foregoing reasons, New Mexico requests that the Special Master limit the scope of Dr. Hutchison’s testimony. Specifically, the Special Master should exclude at trial any opinions on page eight of Texas’s Witness List described as (1) “the impact of groundwater pumping in the Hueco Bolson on New Mexico,” and (2) “opinions formed as a result of his review of the New Mexico groundwater and ILRGM models,” and (3) the “analysis of the technical work undertaken by Ms. Moran [the United States modeling expert].” In addition, and as New Mexico argued in the NM Motion to Strike, the Special Master should exclude the new opinions offered in the Hutchison Declaration, specifically the opinions contained in paragraphs 35-61 (new opinions on Integrated Model) and paragraphs 62-66 (new opinions on conjunctive use), and should preclude the portions of the Hutchison Declaration containing these new opinions from being introduced as exhibits at trial.

³ And in fact Texas has critical holes in its expert’s opinions, namely that none of their experts provide any opinions as to New Mexico’s Rincon and Mesilla groundwater model, provide only extremely limited opinions on the Hueco groundwater model, and provide no rebuttal to New Mexico’s extensive criticisms of Texas’s groundwater modeling except for one rebuttal witness, Dr. Hornberger, who is currently not even listed on Texas’s witness list, as described in more detail in New Mexico’s Motion to Strike Dr. Hornberger’s opinions, filed concurrently herewith.

Respectfully submitted,

/s/ Jeffrey Wechsler

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◆—————
STATE OF NEW MEXICO'S CERTIFICATE OF SERVICE
◆—————

This is to certify that on July 20, 2021, I caused true and correct copies of the **State of New Mexico's Motion in Limine to Limit the Scope of Testimony of Dr. William Hutchison** to be served by e-mail and/or U.S. Mail, as indicated, upon the Special Master, counsel of record, and all interested parties on the Service List, attached hereto.

Respectfully submitted this 20th day of July, 2021.

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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 WITNESS LIST
PURSUANT TO SECTION III OF THE
APRIL 9, 2021 TRIAL MANAGEMENT ORDER

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**Counsel of Record*

June 30, 2021

| | <u>Will-Call Witness</u> | <u>Category/Party</u> | <u>General Summary of Testimony</u> |
|-----|--|--|---|
| 12. | William R. Hutchison, Ph.D., P.E., P.G., 9305 Jamaica Beach, Jamaica Beach, TX 77554 (512) 745-0599 | Retained Expert of Texas | Dr. Hutchison is a Professional Engineer (Geological and Civil) and Professional Geoscientist (Geology). Dr. Hutchison's expected testimony will include, without limitation, the subjects and issues raised, and matters and opinions discussed, in his expert reports and disclosures, supplemental disclosures, declarations, and depositions, as well as responses at trial to evidence presented. The general nature of the expert testimony includes the design and development of a groundwater model to address the issues raised by the Texas Complaint. He will testify regarding the groundwater-surface water interaction on the Rio Grande in the Rincon and Mesilla Valleys, the definition of the 1938 Depletion Condition, the impact of groundwater pumping in the Rincon and Mesilla Valleys on Rio Grande flows, and the impact of groundwater pumping in the Hueco Bolson on New Mexico. He will discuss various simulations he has run with the Texas groundwater model. Further, he will express opinion formed as a result of his review of the New Mexico groundwater and ILRGM models. Also, Dr. Hutchison will provide preemptive rebuttal testimony to issues raised by New Mexico. Dr. Hutchison may also provide further analysis of the technical work undertaken by Ms. Moran. |
| 13. | Art Ivey, Vice-President EP1 Board of Directors 13247 Alameda Ave. Clint, TX 79836 | Non-Retained Expert of Texas; Percipient | Mr. Ivey's expected testimony will include, without limitation, the subjects and issues raised, and matters and opinions discussed, in his disclosures and deposition, as well as responses at trial to evidence presented. The general nature of the testimony includes facts and opinions from the perspective of an owner/operator of a farm within EP1, including but not limited to the following: the rights, receipt, delivery, and/or supply of Rio Grande Project Water to his farm; how he manages and utilizes surface and groundwater resources for agricultural activities; farming and irrigation practices; crop types, including how and why crop decisions are made, as well as historical changes in the types and/or quantities of crops grown; observation of historical trends of decreased water quality and increased salinity. |

No. 141, Original

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

DECLARATION OF WILLIAM R. HUTCHISON IN SUPPORT OF THE STATE OF
TEXAS'S MOTION FOR PARTIAL SUMMARY JUDGMENT; MEMORANDUM OF
POINTS AND AUTHORITIES IN SUPPORT THEREOF
FEDERAL RULE OF CIVIL PROCEDURE 56

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October 29, 2020

I, William R. Hutchison, declare as follows:

BACKGROUND AND EXPERIENCE

1. My name is William R. Hutchison, Ph.D., P.E., P.G. I was born on November 4, 1958 in Nueces County, Texas, and I am competent to make this declaration.
2. I am an independent consultant with over 35 years of professional experience as a groundwater hydrologist. I have been retained by the State of Texas to provide consulting services on hydrologic issues presented in the Lawsuit. My professional resume is included as Attachment 1.
3. My street address is 16717 Captain Hook Road, Jamaica Beach, TX 77554. The United States Postal Service does not provide home mail service to my address. My mailing address is 9305 Jamaica Beach, Jamaica Beach, TX 77554.
4. My education includes a Bachelor of Science degree in Soil and Water Science from the University of California, Davis, a Master of Science degree in Hydrology from the University of Arizona, and a Ph.D. in Environmental Science and Engineering from the University of Texas at El Paso.
5. I am licensed in Texas as follows: Professional Engineer (Geological and Civil) No. 96287, Engineering Firm No. 14526, and Professional Geoscientist (Geology) No. 286.
6. From August 1983 to October 2001, I was employed by various consulting firms or worked as an independent consultant in California and Arizona.
7. From October 2001 to June 2009, I was employed by El Paso Water Utilities in El Paso, Texas.
8. From June 2009 to August 2011, I was the Director of the Groundwater Resources Division of the Texas Water Development Board in Austin, Texas.
9. From August 2011 to July 2012, I was employed by LBG-Guyton Associates in Austin, Texas.
10. Since July 2012, I have been an independent consultant based in Austin,

Texas (July 2012 to July 2015), Aberdeen, North Carolina (July 2015 to January 2016), and Jamaica Beach, Texas (January 2016 to present).

11. I have completed (or I am actively working on) over 60 consulting assignments for over 30 different clients in Texas.

12. In the last four years, I have testified as an expert witness in two cases.

13. In August 2016, I was retained by the Middle Pecos Groundwater Conservation District to testify at a mandamus action filed against the District by Republic Water Company of Texas, LLC (Republic). Republic sued the District to have its permit application declared administratively complete despite not including results from a model run, which was required by the rules of the District. My testimony involved details of the required model run. The Court agreed with the District's interpretation of the District's administrative completeness requirements.

14. In March 2019, I was retained as an expert witness for the General Manager of the Lost Pines Groundwater Conservation District in a contested case hearing. The Lower Colorado River Authority submitted eight applications to withdraw 25,000 acre-feet of water per year from eight wells in Bastrop County, Texas. I prepared an expert report and pre-filed written testimony regarding the use of models to evaluate potential impacts of the proposed pumping. As part of the assignment, I reviewed model runs of the applicant's and protesting parties' experts. Specifically, I processed model output to assess surface water-groundwater interaction impacts, provided predicted impacts to over 2,600 registered wells in the District, and processed model output to provide predicted impacts to 39 monitoring wells for use in future monitoring. I was deposed on my expert report and pre-filed written testimony, and I testified at the contested case hearing.

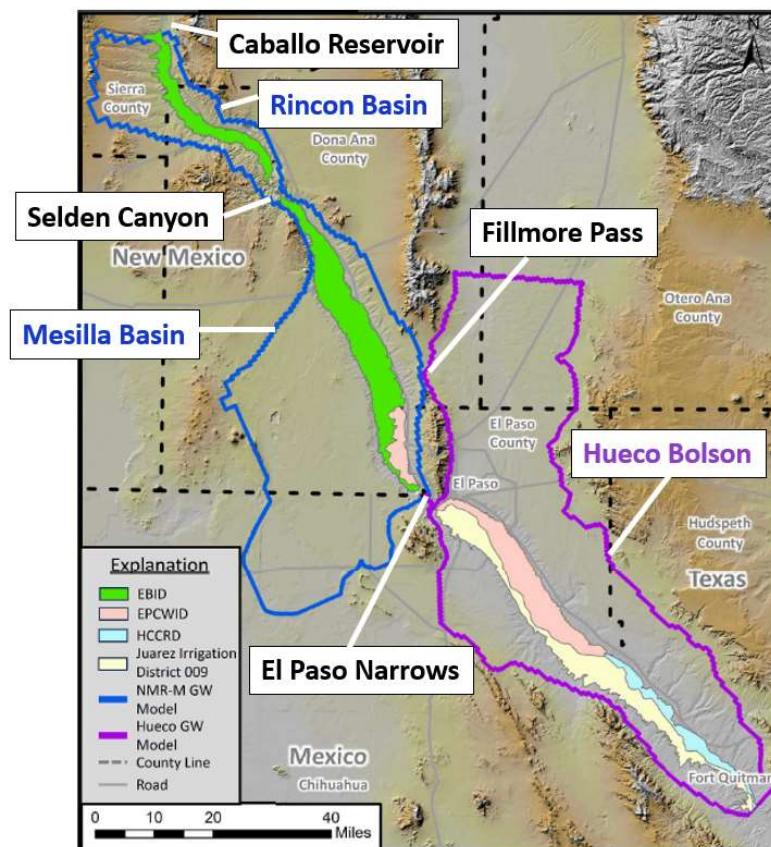
15. A summary of my experience with developing, reviewing, updating, and running simulations with 37 groundwater models in Texas since 2001 is presented in Attachment 2, and 24 models outside of Texas prior to 2001 is presented in Attachment 3.

16. My direct experience in the El Paso, Texas area began in 2001 as an employee of El Paso Water Utilities.

17. In 2006, I completed my doctoral dissertation, titled Groundwater Management in El Paso, Texas, which included details of modeling and management of the Mesilla Basin in New Mexico and Texas.

HYDROGEOLOGIC BACKGROUND

18. The map shown is a modified version of a map in the expert report of Daniel J. Morrissey, one of the New Mexico experts, and is intended to provide some geographic background of the surface water and groundwater resources of the El Paso area. The only modifications to Mr. Morrissey's version of the map is that the labeling in white boxes was added.



19. Water is released from Caballo Reservoir and flows in the Rio Grande through the Rincon Basin.

20. The Rio Grande flows through Selden Canyon from the Rincon Basin to the Mesilla Basin.

21. The Rio Grande flows through the El Paso Narrows from the Mesilla Basin to the El Paso Valley, where the groundwater basin is known as the Hueco Bolson.

22. The Rio Grande at El Paso stream gage is in the El Paso Narrows.

23. The two major diversion points on the Rio Grande just below the El Paso Narrows are the Acequia Madre (for Mexico) and the American Canal (for Texas).

24. The Rincon Basin is entirely in New Mexico (the green area of the map).

25. Most of the Mesilla Basin is in New Mexico (the green area of the map). A small area at the southern end of Mesilla Basin (upstream of the El Paso Narrows) is in Texas (the peach area of the map).

26. Throughout the Rincon and Mesilla Basins in both New Mexico and Texas, there has been varying amounts of groundwater pumping for irrigated agriculture, municipal use, industrial, commercial, domestic, and livestock use.

27. Groundwater flow from the Rincon and Mesilla Basins to the Hueco Bolson is limited to minor flow through Fillmore Pass and the El Paso Narrows due to the geologic structure of the area. This hydrogeologic isolation between the basins means that the Rio Grande at El Paso stream gage is an ideal location to measure and assess impacts of groundwater pumping in the Rincon and Mesilla Basins to Rio Grande flow.

28. Because of the relative geologic isolation and the minimal flow between the Rincon-Mesilla Basin and the Hueco Bolson, groundwater models of the Rincon-Mesilla Basin and the Hueco Bolson can be developed independently.

29. Surface water and groundwater are connected in the Rincon and Mesilla Basins. As water flows in a surface water feature (i.e. a stream, canal, or river), the surface water flow can either increase from the inflow of groundwater or decrease due to seepage losses to the underlying aquifer.

30. When groundwater elevations are higher than surface water elevations, groundwater flows into the surface water body and surface flow increases (a gaining stream condition). Figure 1 conceptually illustrates a gaining stream condition.

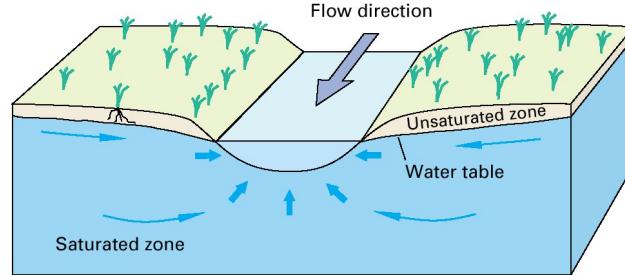


Figure 1. Illustration of a Gaining Stream (from Winter and others, 1988)

31. When groundwater elevations are lower than surface water elevations, surface water flows into the surrounding aquifer and surface flow decreases (a losing stream condition). Figures 2 and 3 conceptually illustrate two types of losing stream conditions.

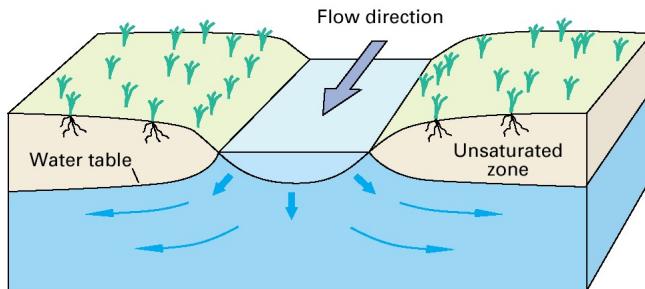


Figure 2. Illustration of a Losing Stream (from Winter and others, 1988)

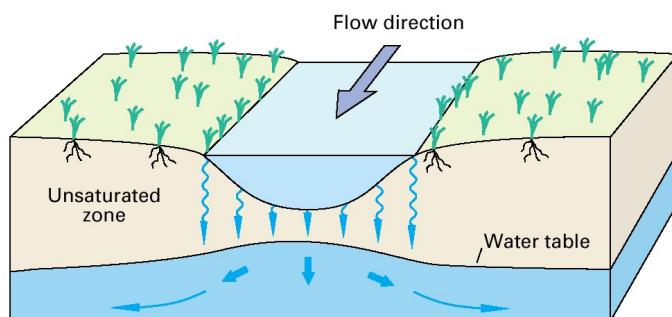


Figure 3. Illustration of a Disconnected Stream (from Winter and others, 1988)

32. Figure 2 illustrates a condition where groundwater elevations are lower than the stream elevation, but still connected to the stream bottom. This is a losing stream condition, and the seepage rate out of the stream is dependent on the difference between the elevation of the water in the stream and the elevation off the groundwater.

33. Figure 3 illustrates a condition where groundwater elevations have dropped lower than the stream bottom elevation. In this case (a disconnected stream), the seepage rate out of the stream has reached its maximum and is based on the depth of the stream only.

34. One of the impacts of groundwater pumping is the reduction of groundwater elevations (also known as drawdown). Long-term groundwater pumping can result in drawdown to the point where a stream that has been historically gaining (i.e. groundwater flows into the stream providing base flow) can be changed to a losing or disconnected stream (i.e. water percolates out of the stream and recharges the underlying aquifer).

SUMMARY OF NEW MEXICO MODEL (INTEGRATED LOWER RIO GRANDE MODEL)

35. New Mexico has disclosed the “Integrated Lower Rio Grande Model” (ILRGM) for use in this case. The ILRGM combines a River Ware model of the surface water network (and includes a simplified representation of the shallow groundwater system) and two detailed groundwater flow models using the MODFLOW-OWHM code: one of the Rincon Basin and the Mesilla Basin and one of the Hueco Bolson.

36. One of the important outputs from the ILRGM is the flow of the Rio Grande in the El Paso Narrows (Rio Grande at El Paso). As described above, the El Paso Narrows represents the geographic and hydrogeologic boundary between the Mesilla Basin (upstream) and the El Paso Valley (downstream). If groundwater pumping in the Rincon and Mesilla Basins results in stream depletions, it can be measured at the gaging station in the El Paso Narrows. Any model that simulates surface water-groundwater interactions of the Rincon and Mesilla Basins should reproduce historic flows at this measuring point and should be capable of quantitatively assessing depletions at this measuring point.

37. As described in the expert reports of Greg Sullivan and Heidi Welsh, New Mexico completed a calibration run of the model (Run 0) simulating historic conditions from 1940 to 2017, a run simulating historic conditions using Rio Grande Project operations rules developed by New Mexico experts (Run 1), and 26 predictive simulations using the ILRGM.

38. The relevant ILRGM runs for this declaration are:

- Run 3 – NM Pumping Off (all New Mexico pumping off);
- Run 6 – RM Pumping Off (all Rincon-Mesilla pumping off); and
- Run 7 – TX Mesilla Pumping Off (all Texas pumping in the Mesilla Basin off).

39. These “pumping off” runs hypothetically assumed no groundwater pumping from 1940 to 2017 and resulted in higher simulated Rio Grande at El Paso flows as compared to the historic operation simulation (Run 1). Under the pumping off runs, groundwater elevations in the Rincon and Mesilla Basins are generally higher than the groundwater elevations in the Rincon and Mesilla Basins in the Run 1 simulation. The higher groundwater elevations result in more groundwater discharge to the surface water system (canals, drains and the Rio Grande itself), and, thus, results in higher surface water flows.

40. The New Mexico experts interchangeably use the terms “depletion” and “pumping impact” in the text of their reports, the figures associated with the reports, and the Excel spreadsheets that contain the results of the ILRGM simulations. New Mexico experts generally calculated depletion as the difference between the stream flow associated with a “no pumping” run of the ILRGM and the stream flow associated with the historic operation run of the ILRGM (Run 1).

ILRGM RIO GRANDE DEPLETION RESULTS

41. New Mexico experts provided ILRGM results for the relevant runs of the model in the following Excel spreadsheets:

- *Run 1 Summary – Operational – All Pumping On v116.xlsx;*
- *Run 3 Summary – Operational – NM Pumping Off v116.xlsx;*

- *Run 6 Summary – Operational – RM Pumping Off v116.xlsx*; and
- *Run 7 Summary – Operational – TX Mesilla Pumping Off v116.xlsx*.

42. New Mexico completed a specific analysis of Rio Grande at El Paso depletions using data and results from the ILRGM results described above. Attachment 4 is the *DataAnn* sheet of the Excel file named *Ferguson Rebuttal revised 9-15-20 v116.xlsx* that was disclosed by New Mexico.

43. The first line of Attachment 4 distinguishes results from the ILRGM, and calculations completed in the spreadsheet for the depletion analysis. The first eight columns are labeled “ILRG”, which means that the data in the columns are directly from ILRGM. The final 11 columns are labeled “Calc”, which means that the data in the columns are calculations completed in this spreadsheet based on ILRGM results. Please note that the blue color of the “Calc” columns was from the original Excel file disclosed by New Mexico.

44. The results in the *DataAnn* sheet of the Excel file can be grouped as follows:

- Rio Grande at El Paso Flow;
- Northwest Wastewater Treatment Plant (WWTP) Discharge;
- Sum of Rio Grande at El Paso Flow and Northwest WWTP Discharge;
- Pumping Impact in acre-feet per year; and
- Specific State Pumping Impact as a Percentage of Total Impact.

45. WWTP flow is from Texas Mesilla pumping Rio Grande at El Paso flow, Northwest WWTP discharge, and the sum of Rio Grande at El Paso flow and Northwest WWTP discharge are provided for each model run (Run 1, Run 3, Run 6, and Run 7) in the spreadsheet.

46. The Northwest WWTP is a El Paso Water facility that treats municipal wastewater from the west side of El Paso. The source of the water supply on the west side of El Paso (and, thus, the origin of the wastewater) is almost exclusively from groundwater pumping in the Texas portion of the Mesilla Basin (i.e. the Canutillo well field).

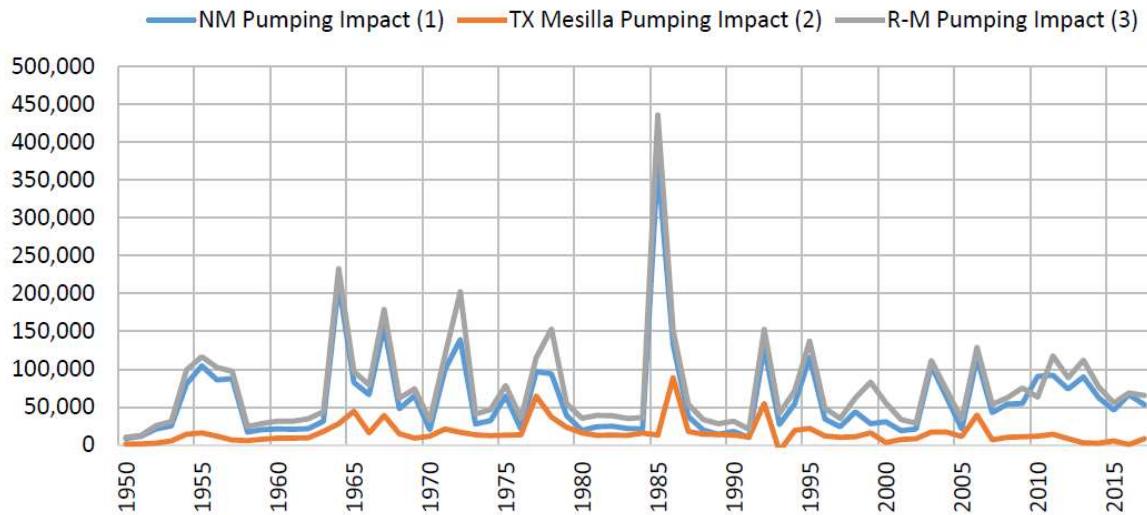
47. The Northwest WWTP discharge enters the Rio Grande downstream of the Rio Grande at El Paso stream gage. Thus, the sum of Rio Grande at El Paso and the Northwest WWTP discharge represents the available flow for diversions to the Acequia Madre (Mexico) and the American Canal (Texas) below the El Paso Narrows.

48. The difference in the sum of Rio Grande at El Paso flow and Northwest WWTP between a relevant “no pumping” run and the historic operation simulation (Run 1) is defined as the “pumping impact” in the spreadsheet (in acre-feet per year), and is either termed “depletion” or “pumping impact” in the text and figures of the New Mexico expert reports.

49. The annual depletions were presented in Figure 19-2 (page 147) of the September 15, 2020 version of the report by Greg Sullivan and Heidi Welsh and is reproduced below.

Depletion to Rio Grande at El Paso Flow from Pumping in the Rincon and Mesilla Valleys
ILRG Model
1950 - 2017

Annual Pumping Impacts on Rio Grande at El Paso Flow (acre-feet)



50. The columns on the right side of the *DataAnn* sheet (Attachment 4) are calculations of the pumping impact caused by each state’s pumping expressed as a percentage of the total impact. New Mexico experts alternatively defined the total impact as

the impact simulated in Run 6 or as the sum of the impact simulated in the two state runs (Run 3 and Run 7), so there are two calculations of each state's impact.

51. The final line of New Mexico's spreadsheet with ILRGM results related to streamflow depletions (Attachment 4) are the average flows and depletions (calculated for each column in the spreadsheet) for the period 1940 to 2017.

52. Average stream depletions (or groundwater pumping impacts) as calculated at the Rio Grande at El Paso gage for the period 1940 to 2017 based on ILRGM results (as shown in Attachment 4) were reported by experts retained by New Mexico as follows:

- Total Rincon-Mesilla Groundwater Pumping Impact: 66,351 AF/yr
- New Mexico Groundwater Pumping Impact: 52,610 AF/yr
- New Mexico Groundwater Pumping Impact: 79 percent of total impact
- Texas Mesilla Groundwater Pumping Impact: 13,700 AF/yr
- Texas Mesilla Groundwater Pumping Impact: 21 percent of total impact

DISCUSSION OF ILRGM RESULTS AND ILRGM LIMITATIONS

53. The analysis presented in the spreadsheet (Attachment 4) completed by New Mexico experts establishes that groundwater pumping in New Mexico has depleted surface water flow in the Rio Grande.

54. In addition, Daniel J. Morrissey, one of New Mexico's experts acknowledged that the ILRGM shows depletions due to pumping in the Rincon and Mesilla Basins to streamflow measured at El Paso (Morrissey deposition, December 9, 2019, page 75, lines 12 to 18).

55. The ILRGM can be used for analyses that focus on large geographic areas and over a period of few to several years.

56. Limitations of the ILRGM affect the reliability of results focused on a single year or time periods less than one year, and results that focus on a small geographic area. The geographic and temporal scale limitation of ILRGM results is primarily because the

RiverWare model “governs” the results (Daniel J. Morrissey deposition of December 10, 2019, page 65, lines 13 to 23).

57. All models are simplifications of real-world systems. The New Mexico RiverWare model calculates surface water-groundwater interaction within “groundwater objects” that are several square miles in area. In contrast, the New Mexico groundwater models of the Rincon-Mesilla Basins and the Hueco Bolson calculates surface water-groundwater interactions in cells that are 10 acres in area. The groundwater objects in the RiverWare model are analogous to the groundwater model cells when comparing the surface water-groundwater interaction calculations. Daniel J. Morrissey acknowledged that the calculations in the RiverWare model are more “generalized” than in the groundwater models (Daniel J. Morrissey deposition of December 10, 2019, page 65, lines 6 to 12).

58. In summary, the ILRGM calculations rely on surface water-groundwater interaction calculations that are averaged over an area of several square miles and ignore groundwater model calculations that are averaged over an area of 10 acres in the groundwater models.

59. The surface water-groundwater interaction issue is one of the most important aspects of this litigation. Stream depletion is a reduction in streamflow that is caused by groundwater pumping. Calculations of stream depletion with the groundwater models are averaged over areas of about 10 acres, but calculations with the RiverWare model represent averages over areas that are several square miles. The choice by New Mexico experts to rely on the RiverWare model results instead of the groundwater model results is inconsistent with their claims of the sophistication and necessary complexity of the ILRGM (e.g. Daniel J. Morrissey deposition of December 9, 2019, page 44, line 22 to page 45, line 4).

60. Reliance on the ILRGM and its simplified representation of the surface water-groundwater interactions in the RiverWare model is appropriate for evaluating impacts of pumping over a large scale (i.e. impacts of pumping in New Mexico and impacts of pumping in Texas) and over a few to many years.

61. However, the limitations prevent reliable use of ILRGM results for analyses over smaller scales (several square miles) and for short time scales (months to a single year).

CONJUNCTIVE MANAGEMENT

62. Estevan Lopez, one of New Mexico's expert witnesses, defined conjunctive use during his July 6, 2020 deposition on page 68, lines 3 to 6 as: "using the available surface water as the primary irrigation supply and making up the difference up to the crop irrigation requirements with supplemental groundwater."

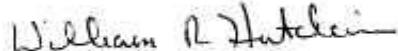
63. A proper conjunctive management approach increases total supply because the surface water component and the groundwater component are different sources.

64. If the groundwater supply is connected to the surface water supply (i.e. they are interconnected), the groundwater pumping depletes the surface water supply to some extent. The surface water depletion component of the groundwater pumping is not a "new supply" or "separate supply."

65. New Mexico's practice of conjunctive use is to use surface water **and** to pump interconnected groundwater limited only by crop needs or permit limits (Estevan Lopez 30(b)(6) deposition, September 18, 2020 page 36, lines 17 to 22).

66. New Mexico's "conjunctive use" as defined by Mr. Lopez ensures that New Mexico water users receive all the water they need while decreasing some water that would have otherwise flowed into Texas.

I declare under penalty of perjury that the foregoing is true and correct. Executed this 29th day of October 2020 at Aberdeen, North Carolina



William R. Hutchison, Ph.D., P.E., P.G

Exhibit C

May 31, 2019

EXPERT REPORT OF: William R. Hutchison

In the matter of:

No. 141, Original

In the Supreme Court of the United States

State of Texas v. State of New Mexico and State of Colorado

Prepared for:

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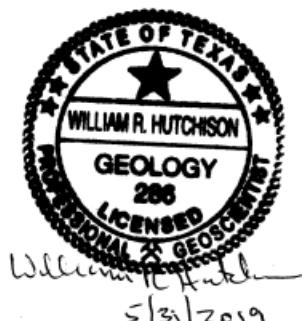
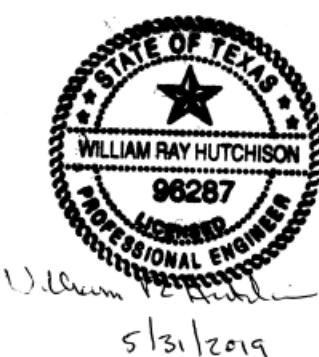


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Attachments

- 1 – Professional Resume of William R. Hutchison, Ph.D., P.E., P.G.**
- 2 – Groundwater Modeling Experience inside and outside of Texas**
- 3 – El Paso Water Utilities Letter to Transboundary Aquifer Assessment Coordinators (July 11, 2008)**

Associated Technical Memoranda – Model Development

- 1 – Model Grid, Service Areas, Zones**
- 2 – Gridded Acres CU**
- 3 – Adjusted CU – Double Cropping and Match GoldSim Output**
- 4 – Monthly Zonal Estimates of Agricultural Supply and Deep Infiltration**
- 5 – Agricultural Groundwater Pumping and Deep Infiltration of Irrigation Water (WEL)**
- 6 – Urban and Domestic Groundwater Pumping (WEL)**
- 7 – Mountain Front Recharge (WEL)**
- 8 – Urban Infiltration (WEL)**
- 9 – Combined WEL Package (Complete WEL Package)**
- 10 – BAS and DISU files**
- 11 – Basin Underflow (CHD)**
- 12 – Aquifer Parameters (LPF)**
- 13 – Stream Flow Routing (SFR) and Gage (GAGE)**
- 14 – Groundwater Evapotranspiration (EVT)**
- 15 – Model Calibration Datasets (Groundwater Elevations, Surface Water Flows)**
- 16 – NAM File and Solver files**

Associated Technical Memoranda – Model Calibration and Simulations

- 17 – Model Calibration**
- 18 – Reduced Pumping Scenarios (1938 to 2016)**
- 19 – Reduced Pumping Scenarios (1985 to 2016)**
- 20 – Alternative Consumptive Use Scenarios**
- 21 – Conjunctive Use Scenarios**

5.0 Model Overview

37. Data were gathered and developed from 2013 to 2018 by consultants for the State of Texas that were incorporated into the Texas model. These data include an updated geologic framework, estimates of irrigation area and agricultural consumptive use, and updated and improved water budgets.

38. Updated geologic framework data were developed based on John Hawley's most recent work (Hawley and others, 2017). Implementation of Hawley's updated geologic framework is documented by Schorr (2019a).

39. Irrigation area and agricultural consumptive use data were developed as described in Land IQ (2019).

40. Basin-wide water budget analyses for land-surface water, surface water and groundwater were developed as described in Schorr and Kikuchi (2019).

41. The conversion of the water budget information of Schorr and Kikuchi (2019) and other information to model input datasets were documented in Schorr (2019b).

42. Details of how the information from Land IQ (2019), Schorr (2019a), Schorr (2019b), and Schorr and Kikuchi (2019) were used in the specific development of individual model packages are presented in 16 Technical Memoranda.

43. The 16 Technical Memoranda that document model development are summarized in Table 1. The five Technical Memoranda that document the calibration of the model and the results of the predictive simulation results are summarized in Table 2.

5.2 Model Domain and Grid

53. The domain of the model is shown in Figure 5 and compared with the model domain of the OSE model (S.S. Papadopoulos & Associates, Inc., 2007). The most significant difference is the southwestern expansion of the model domain to incorporate the Conejos Medanos well field in Mexico.

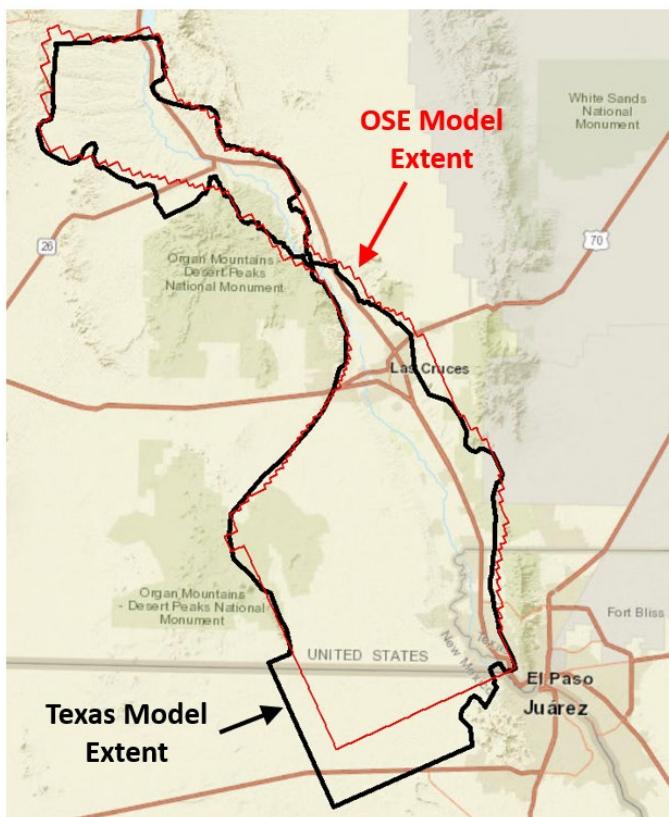


Figure 5. Model Domain (Texas Model and OSE 2007 Model)

54. Details of the model grid are discussed in Technical Memorandum 1. In general, finer grid spacing reduces model error, but models with small grid sizes can result in difficulties because the models can be too large to run and calibrate effectively. Balancing the need for accuracy and the ability to effectively calibrate a model with acceptable run times and file sizes is generally guided by considering the model objectives.

Exhibit D

December 23, 2019

REBUTTAL REPORT OF: William R. Hutchison

In the matter of:

No. 141, Original

In the Supreme Court of the United States

State of Texas v. State of New Mexico and State of Colorado

Prepared for:

Somach Simmons & Dunn
500 Capitol Mall, Suite 1000
Sacramento, CA 95814

Prepared by:

William R. Hutchison

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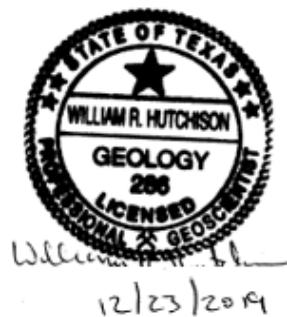


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1.0 Introduction

1. My name is William R. Hutchison, Ph.D., P.E., P.G. I have been retained by the State of Texas to provide consulting services on hydrologic issues presented in the Lawsuit. My professional background and specific qualifications are detailed in my May 31, 2019 Expert Report submitted for this case (Hutchison, 2019).

2.0 Question Posed by Counsel for State of Texas

2. Counsel for the State of Texas asked me to review the groundwater flow model of the Hueco Bolson submitted by the State of New Mexico (Spalding and Morrissey, 2019) and asked the following question:

Is the new Spalding and Morrissey (2019) model of the Hueco Bolson a better model than the existing USGS model of the Hueco Bolson (Heywood and Yager, 2003) to address issues associated with the Lawsuit?

3.0 Summary of Conclusions and Opinions

3. As developed in this rebuttal report, the opinions that Spalding and Morrissey articulated in their expert report could have been drawn from the results of the USGS model of the Hueco Bolson (Heywood and Yager, 2003) and from the results of the application of the USGS model since its publication.

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

Exhibit E

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

WILLIAM R. HUTCHISON

MAY 28, 2020

REMOTE ORAL AND VIDEOTAPED DEPOSITION of WILLIAM R. HUTCHISON, 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 May 28, 2020, from 9:05 a.m. to 4:35 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.

1 for more storms so if I disappear, I'll get back as
2 soon as I can.

3 **Q. Sure.**

4 A. Just wanted to give you a head's up.

5 Q. No, thank you. I -- I appreciate that. So
6 we'll know if you disappear, you know, what's likely
7 going on.

8 A. Yeah. I'll call back and let them know I'm
9 trying to get back in, but it -- it might happen.

10 Q. Okay. So just real briefly then, what did
11 you do to prepare for this deposition today?

12 A. I reread my expert report. I reread the
13 tech -- the tech memos associated with the expert
14 report. I reread my rebuttal report. I read the -- I
15 attended George Hornberger's deposition to get a feel
16 for what this virtual deposition is like. I read Phil
17 King's and Erek Fuchs' transcripts. I talked with Mac
18 Goldsberry earlier this week to get a sense of what --
19 what to expect. Oh, and, of course, reread -- well,
20 not -- that's strictly for the preparation of this
21 deposition, I think I said.

22 Q. Dr. Hutchison, on your billing records,
23 there's a significant amount of time that's been
24 expended since December, since the rebuttal
25 disclosures from the State of Texas. So what work

1 **have you been doing since December, 2019?**

2 A. Since December, 2019, I've continued to
3 review the New Mexico expert reports, running their
4 models, the groundwater models, comparing results with
5 mine. I've attended depositions in Denver. I did
6 spend a little bit of time reviewing the new USGS
7 model, the updated one that they released again in
8 April. I think that about covers it.

9 **Q. On your ongoing review of the model results**
10 **both from, you know, New Mexico's model in comparison**
11 **to yours, are you planning to provide any supplemental**
12 **disclosures related to that work?**

13 A. At this point, I'm providing information to
14 counsel, and when requested, to other experts.

15 **Q. And what other experts are you working with**
16 **in providing that material?**

17 A. Well, I've provided information and results
18 from the MODFLOW models to Shane Coors as part of his
19 work on -- he's primarily reviewing the RiverWare
20 model, and to the extent they interacted/overlapped,
21 I've been providing MODFLOW results to him.

22 **Q. Do you know if Shane Coors has also been**
23 **running the MODFLOW models or has that really been**
24 **your work that you've been providing to Shane Coors?**

25 A. My understanding is he's running -- he has to

1 run the MODFLOW models in order to run the entire
2 integrated model so to that extent, he's been doing
3 that. The results he's been extracting have been
4 from -- from the RiverWare model is my understanding.

5 Q. Do you know whether or not Shane Coors, his
6 ongoing work, if there is plans to have another
7 supplemental disclosure from Shane Coors?

8 A. I don't know one way or the other.

9 Q. Okay.

10 A. That's Shane.

11 Q. Have you reviewed Shane Coors' supplemental
12 report that he disclosed in this case?

13 A. Yes.

14 Q. And did you review Jean Moran or Stetson
15 Engineering report that was disclosed in the
16 supplemental disclosure in the case?

17 A. Yes.

18 Q. Have you done any additional analysis related
19 to the Stetson Engineering report? And -- and when I
20 say "any additional analysis," you know, she -- Jean
21 Moran states that results related to the Texas report
22 and so I'm -- I'm curious, you know, if you have
23 reviewed her materials and come to any conclusions?

24 A. I don't really think I understand what
25 you're -- what you're asking. Results related to the

1 Texas report? I don't understand what you mean.

2 Q. I should have said Texas model.

3 A. I'm afraid I just don't follow. She -- she
4 ran the model and provided results in her supplemental
5 report, and I read the report.

6 Q. Did you agree with her results from running
7 your model?

8 A. Well, I never read -- I never looked at it in
9 that sense. I was looking at the report more than the
10 actual model results. I didn't -- I didn't get the
11 model files and actually run -- rerun her -- her runs
12 and drill down to that level of detail.

13 Q. Okay. I'm going to go ahead and mark your
14 rebuttal report as another exhibit.

15 (Exhibit No. 13 was marked.)

16 Q. (BY MS. THOMPSON) Do you have the December,
17 2019, rebuttal report? It's marked Exhibit 13.

18 A. Yes, I have it.

19 Q. Okay. If you could turn to the first page of
20 your report. On this first page, Dr. Hutchison, you
21 state that, "Counsel for Texas asked you to review the
22 2019 McDonald Morrissey model of the Hueco Bolson and
23 determine whether it's a better model than the
24 existing 2013 Heywood and Yager model to address the
25 issues raised with this lawsuit." Is that correct?

1 A. That's right.

2 Q. So let's break that down into a couple
3 specific questions then. What review did you do of
4 the McDonald Morrissey model?

5 A. Well, at very -- I mean, I ran the model. I
6 compared the output to what had been provided as
7 output. I did some post processing on the output. I
8 looked at the convergence and the water budgets. I
9 read the report and evaluated what -- what the
10 conclusions were.

11 Q. And did you provide the post-processing
12 outputs that -- that you developed?

13 A. Well, the main one was the -- that one
14 spreadsheet that had the convergence issues. The post
15 processing was more of comparing the actual model run
16 that I did with the -- the reported files, so, no, I
17 didn't include those because everything matched up.
18 In other words, the provided output matched with my --
19 my running of the model. So satisfied that I -- I
20 received the proper output files.

21 Q. Okay. So then to make sure I understand,
22 when you ran the model, your output matched the
23 McDonald Morrissey model output and so you felt
24 satisfied that because of that match, you didn't have
25 any concerns with the output and so you didn't provide

any of that material?

2 A. Right. It was the same thing that they had
3 provided so seemed duplicative to provide that. I had
4 no issues with it on the actual output files.

Q. Okay. Did you run any statistical analysis or, I think, what also is referred to as calibration metrics on the model?

8 A. No.

9 Q. And prior to the McDonald Morrissey, there --
10 there had been other groundwater models that had been
11 developed in the Hueco Bolson, correct, other than the
12 Heywood and Yager model?

13 A. Correct.

14 Q. But of all of those prior models, am I
15 correct that it's your opinion that the Heywood and
16 Yager model itself is the most appropriate to address
17 the issues in this case?

18 A. Yes.

19 Q. I'm going to mark the Heywood and Yager
20 report.

21 | (Exhibit No. 14 was marked.)

22 Q. (BY MS. THOMPSON) So do you have Exhibit 14
23 now?

24 A. Yes, I do.

25 O. Okay. And is this the USGS report from what

1 linkage. That's what I was talking about. But if
2 you're going back to what the rebuttal report is, the
3 opinions I've expressed there are limited to what a
4 MODFLOW model by itself could be relative to the
5 issues that I identify in the rebuttal report that are
6 drawn from the Spalding and Yager report -- I'm
7 sorry -- the Spalding and Morrissey report.

8 **Q. So your analysis then is limited not to all**
9 **the issues raised by New Mexico; your opinion then of**
10 **the use of the Heywood and Yager model would be**
11 **limited to only the issue of whatever the**
12 **groundwater/surface water interactions and the effect**
13 **of surface water flows in the Hueco solely, not any of**
14 **the other issues raised by New Mexico?**

15 **MR. GOLDSBERRY:** Objection; ambiguous.

16 A. When you read your question, you say so your
17 analysis. I think if you restate that so your
18 rebuttal report is limited, not to all the issues
19 raised by New Mexico, your opinion then of the use of
20 the Heywood and Yager model would be limited only to
21 the issue of whatever groundwater/surface water
22 interactions and the effect of surface water flows in
23 the Hueco solely, that's correct. So I would -- I
24 would suggest replacing rebuttal report for the word
25 "analysis"?

1 Q. (BY MS. THOMPSON) Okay. So then in your
2 rebuttal report on -- in Paragraph 9 -- we'll go back.
3 That's on Exhibit 13. This statement says, "Based on
4 this review, the USGS model is a more appropriate
5 model to base any opinions and conclusions relative to
6 the Hueco Bolson for this litigation." Should we
7 strike that word "any" and replace it with your
8 description of the limited issue that we just talked
9 about?

10 A. I don't think I would agree with that only
11 because the issues related to the -- relative to the
12 Hueco Bolson, I think, is correct. The larger issues
13 have to do more with the project as a whole or as a
14 management unit, but in terms of the Hueco Bolson, the
15 USGS model, the Heywood/Yager model is appropriate.

16 Q. But, again, you just talked about how the
17 Heywood and Yager model could not be used to develop,
18 you know, for McDonald Morrissey to develop any
19 opinions or conclusions related to the Hueco Bolson,
20 correct?

21 A. Well, you say here McDonald Morrissey could
22 not be developed -- this is confusing.

23 Q. So I'm just trying to understand because here
24 you say -- you use the word "any," and you're --
25 you're stating my understanding of your opinion is

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

**UNITED STATES OF AMERICA'S DISCLOSURE OF
EXPERT WITNESSES**

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U.S. Department of Justice

Counsel for the United States

Pursuant to Section 6.2.2 of the September 10, 2018 Case Management Plan, as amended, and Fed. R. Civ. Pro. 26(a)(2), the United States of America (“United States”) respectfully discloses its expert witnesses, as follows:

I. Jean M. Moran, P.G., C. Hg., Senior Hydrogeologist, Stetson Engineers, Inc., 785 Grand Ave., Suite 202, Carlsbad, CA 92008. Ms. Moran will provide expert testimony on the subjects of surface water-groundwater interaction, hydrogeologic modeling with respect to the Rincon and Mesilla Valleys including the Rio Grande Project area, and the impacts on Rio Grande flows of groundwater pumping in New Mexico. Pursuant to Fed. R. Civ. P. 26(a)(2)(B)(i)-(vi), a written report prepared and signed by Ms. Moran is submitted concurrently herewith. Electronic copies of the references listed in her report, including model code and files that she reviewed, have been transmitted directly to Veritext on a hard or flash drive for uploading to the Veritext Vault.

II. Nicolai Kryloff, Project Historian, Historical Research Associates, Inc., 419 Seventh Street, NW, Suite 403, Washington, D.C., 20004. Mr. Kryloff will provide expert testimony on the history of the Rio Grande Compact, the history of the Rio Grande Project, and the history of surface water and groundwater development below Elephant Butte Reservoir. Pursuant to Fed. R. Civ. P. 26(a)(2)(B)(i)-(vi), a written report prepared and signed by Mr. Kryloff is submitted concurrently herewith. Mr. Kryloff has not previously testified as an expert at trial or by deposition.

III. Ian M. Ferguson, Ph.D., P.E. Dr. Ferguson is a Hydrologic Engineer from the Bureau of Reclamation’s Technical Service Center, Water Resources Engineering and Management Group, in Denver, Colorado, whose ordinary duties do not include providing expert testimony. For his work on this matter, Dr. Ferguson has received no compensation in addition to the salary he receives as a federal employee.

A. Subject Matter

Under Fed. R. Civ. P. 26(a)(2)(C)(i), Dr. Ferguson will provide testimony on the current operations of the Rio Grande Project (“Project”) including the following: (1) Project operations under