No. 141, Original

IN THE SUPREME COURT OF THE UNITED STATES Tate of Texas, Plaintiff, v. State of New Mexico and State of Colorado, Defendants. OFFICE OF THE SPECIAL MASTER

STATE OF NEW MEXICO'S TRIAL BRIEF

HECTOR H. BALDERAS
New Mexico Attorney General
TANIA MAESTAS
Deputy Attorney General
CHOLLA KHOURY
Assistant Attorney General
ZACHARY E. OGAZ
Assistant Attorney General
P.O. Drawer 1508
Santa Fe, New Mexico 87501
505-239-4672

MARCUS J. RAEL, JR.*
LUIS ROBLES
SUSAN BARELA
Special Assistant Attorneys General
Robles Rael & Anaya
500 Marquette Ave NW #700
Albuquerque, NM 87102
marcus@roblesrael.com
505-242-2228

*Counsel of Record

September 27, 2021

TABLE OF CONTENTS

I.	INTE	RODUCTION1
A	. The	e Claims Presented
В	. Iss	ues Previously Decided
C	. Re	maining Issues to Be Decided at Trial
II.	STA	NDARD OF DECISION7
A	. Co	mpact Interpretation
В	. Bu	rden of Proof to Establish a Compact Violation
C	. Bu	rden of Proof for Injunctive Relief
III.	TH	IE COMPACT APPORTIONMENT9
A	His	storical Project Operations Establish the Interstate Apportionment
		The Principles that Define the Compact Baseline are Established by the Course of rmance
	2. 1	New Mexico's Evidence of the Compact Baseline
	a.	Plain Language of the Compact
	b.	Circumstances when the Compact Was Made
	c.	Negotiation History
	d.	Course of Performance 14
B B		w Mexico Accedes to the D2 Curve as Roughly Consistent with the Protected e of Project Operations and the Compact Apportionment
	overni	e 1938 <i>Depletion</i> Condition Proposed by Texas is Inconsistent with the Principles ng the Allocation and Apportionment of the Waters of the Rio Grande below t Butte
_		th States Have a Compact Duty to Prevent Water Users Within Their Jurisdictions terfering with Baseline Project Operations
IV. API		HETHER THE STATES HAVE COMPLIED WITH THE COMPACT IONMENT
A	Ne	w Mexico Has Not Received Its Apportionment since 2006
		Starting in 2006, Reclamation Changed the Project's Allocation Method to New co's Detriment
		The Post-2006 Allocation Method Prevents New Mexico from Receiving its Compact rtionment and Negatively Impacted the Project
В	. Tex	xas Has not Been Injured
	1. V	Water Use in New Mexico Has Remained Stable or Declined
	2.	Texas Received its Full Entitlement in All but Two Years

VI.	(CONCLUSION 3	30
В	. <i>A</i>	Actions in Texas Impact New Mexico's Compact Apportionment	29
A	. Т	The Court Should Rely on the NMILRG Model	28
V.	EV	TIDENTIARY ISSUES 2	28
	5.	Texas Has Suffered no Economic Injury	26
		Since 2006, Texas Received Significantly More Water than It Is Entitled to Received the Compact	
		In All But a Few Years, Texas Left Over 20,000 Acre-Feet of Water Unused in the servoir	

The State of New Mexico ("New Mexico"), pursuant to Section X of the Trial Management Order (Dkt. 501) submits this Trial Brief in advance of the remote trial setting on October 4, 2021.

I. INTRODUCTION

"This case is a dispute about where the waters of the Rio Grande have been going, where they should have been going, and where they should go in the future." Order, 1 (Apr. 14, 2020) (Dkt. 340). In 1938, the States of New Mexico, Texas, and Colorado struck a bargain—with the consent of Congress—to divide the waters of the Rio Grande equitably among them. But the 1938 Rio Grande Compact ("Compact") says nothing explicitly about how to divide water below Elephant Butte Reservoir between New Mexico and the State of Texas ("Texas"). Instead, "the Compact relies on the Rio Grande Project for water delivery and is *programmatic* in its apportionment of water as between Texas and New Mexico." Order, 3 (May 21, 2021) (Dkt. 503). The Supreme Court will, through this trial, determine how the Compact divides water from Elephant Butte Reservoir to Fort Quitman and whether the parties have met their Compact obligations.

New Mexico seeks only to protect its share of water. Texas initially argued the Compact apportions New Mexico nothing below Elephant Butte Reservoir. The Special Master correctly rejected this argument and established New Mexico is due 57% of the water supply of the Rio Grande Project ("Project"). The remaining dispute concerns how to define the protected Project water supply for New Mexico and Texas and what each state—and the United States by operation of the Project—must do to ensure water is divided according to the agreed apportionment.

A. The Claims Presented

In this case, Texas complains that New Mexico has violated the Compact below Elephant Butte Reservoir "by allowing downstream New Mexico users to siphon off water below the Reservoir" in a manner inconsistent with the operation of the Project and its division of waters

between the States. *Texas v. New Mexico*, 138 S. Ct. 954, 957-58 (2018). Texas's Complaint comprises a single cause of action for violation of the Compact and seeks (1) declaratory judgment determining the rights of Texas; (2) injunctive relief commanding New Mexico to cease interference with the delivery of Texas's apportionment through the Project; and (3) an award of damages for injuries associated with the under-delivery of its apportionment from 1985 to the present. *See* Complaint (Jan. 2013). Texas bears the burden to establish a method to define its apportionment; to prove that, in any year, Texas did not receive the water to which it was entitled; to prove that the under-delivery of water was caused by New Mexico's actions or omissions; and to prove Texas was injured by the alleged under-delivery. This phase of the bifurcated trial concerns each of these elements. The next phase concerns, if liability is established, the appropriate remedy.

The United States, as plaintiff in intervention, asserts "essentially the same claims Texas already has." *Texas v. New Mexico*, 138 S. Ct. at 956. The United States "assumed a legal responsibility" under various contracts with Project beneficiaries ("Downstream Contracts"); those contracts are "inextricably intertwined" with the Compact; and by operating the Project, the United States acts as a sort of "agent" of the Compact, "charged with assuring the Compact's equitable apportionment to Texas and part of New Mexico is in fact made." *Id.* at 959 (internal quotation marks omitted). In its Complaint in Intervention, the United States alleges that "New Mexico has allowed the diversion of surface water and the pumping of groundwater that is hydrologically connected to the Rio Grande" in a manner that interferes with these responsibilities. *See* Complaint in Intervention, ¶¶ 13-14 (Feb. 2014). More specifically, the United States alleges that depletions within New Mexico in excess of its apportionment may cause the United States to "release additional water from storage" to make deliveries to Texas, and "Project efficiency" may

be reduced to such a point that "43% of available water" cannot be delivered to beneficiaries in Texas. *Id.* at ¶¶ 14-15. The United States seeks (1) declaratory relief establishing that New Mexico has a duty to prohibit or prevent water users in New Mexico from interfering with or intercepting Project water deliveries and (2) injunctive relief commanding New Mexico comply with its duty. The United States has the burden to prove that the Compact and Downstream Contracts prohibit conjunctive use of water in the Project, and that New Mexico has permitted, or otherwise failed to prohibit, water uses such that deliveries to Texas were less than its apportionment.

New Mexico's counterclaims against Texas present a "mirror image" of the plaintiffs' claims. See Order, 28 (Mar. 31, 2020) (Dkt. 338). In Counterclaim 1, New Mexico alleges that Texas has violated the Compact by allowing diversions of surface water and hydrologically connected groundwater in excess of its apportionment. See State of New Mexico's Counterclaims, ¶¶ 63-71 (May 22, 2018). New Mexico claims that these excess diversions interfere with delivery of New Mexico's apportionment and reduce drain flows in Texas in a manner that reduces Project efficiency, increases the amount of water that must be released from Project storage to satisfy irrigation demands, and reduces the amount of water available for allocation to New Mexico water users. In Counterclaim 4, New Mexico alleges that Texas has been unjustly enriched by receiving and claiming the right to receive the delivery of water in excess of its Compact apportionment under the system of Project accounting and allocation in place from 2006 forward. See Id. at ¶¶ 91-98. New Mexico seeks (1) declaratory relief establishing its right to a Compact apportionment below Elephant Butte Reservoir; (2) injunctive relief commanding Texas to cease actions that interfere with the delivery of New Mexico's apportionment through the Project; and (3) an award of damages against Texas for its unjust enrichment and past and continuing violations of the Compact. New Mexico's burdens of proof mirror Texas's. To prevail on its counterclaim for violation of the Compact, New Mexico must establish a method for defining its Compact apportionment; prove that it has received less than the amount of water apportioned to it, and prove that the under-delivery was caused by actions or omissions by Texas. On the unjust enrichment claim, New Mexico must establish a method of determining Compact apportionments and prove that Texas knowingly and inequitably received water in excess of its Compact apportionment at New Mexico's expense. If Texas's liability is established, the question of remedies is reserved for the next phase of trial.

B. Issues Previously Decided

The Special Master has resolved several issues as a matter of law.

First, the Compact apportions to New Mexico and Texas each a portion of the water downstream of Elephant Butte Reservoir. The "Compact relies on the Rio Grande Project for Water Delivery and is *programmatic in* its apportionment of water between Texas and New Mexico," below Elephant Butte Reservoir. Order, 3 (May 21, 2021) (Dkt. 503). The United States delivers "New Mexico's downstream apportionment" and all of Texas's apportionment through the Project. *Id.* at 46. Although neither state is a signatory to the Downstream Contracts, they represent the interests of their water users *parens patriae* in this Compact action, and the Downstream Contracts define the Compact apportionments to the states. *See Id.* at 49-51.

Second, the United acts as a sort of "agent" of the Compact and is "charged with assuring the Compact's equitable apportionment to Texas and part of New Mexico is in fact made." *Texas* v. New Mexico, 138 S. Ct. at 959.

Third, the Compact apportionment depends on a protected "baseline level of Project operations." Order, 5 (May 21, 2021) (Dkt. 503). "[T]he states entered into the Compact against the backdrop of the existing Project and relied on its established operations to effectuate the Compact." *Id.* at 13. The Compact apportionment depends on the continuance of certain aspects

of Project operations as they existed "prior to Compact formation." *Id.* at 5. The protected "baseline" does not require "agricultural practices, irrigation practices, and other forms of development to remain static." *Id.* But, it does not allow "unlimited indirect capture of Rio Grande surface flows through the unregulated capture of hydrologically connected water or the elimination of Project return flows." The protected "baseline" includes "protection of return flows to effectuate the Compact's apportionment." *Id.*

Fourth, the Compact apportionment requires a "protected baseline division" of Project supply according to the ratio of irrigable acres in New Mexico and Texas: 57% to New Mexico and 43% to Texas. *Id.* at 6.

Fifth, the states have a "Compact-level duty to avoid material interference with Reclamation's delivery of Compact water." *Id.* at 5. This duty includes a requirement to "avoid and prevent the capture of Rio Grande surface water, drain return flows, and hydrologically connected groundwater" if the effect of such capture is "inconsistent with Compact water deliveries" or "interferes with long-term operation of the Project." *Id.* With respect to its apportionment, "New Mexico's sovereign laws apply to define the relative rights between New Mexicans." *Id.* at 48.

Last, Texas may not "seek damages for Compact violations that predate 1985." *Id.* at 52.

C. Remaining Issues to Be Decided at Trial

With respect to Compact interpretation, the Special Master has determined that "[t]he Compact is ambiguous as to the detailed scope of the apportionments and the New Mexican duty." Order, 47 (May 21, 2021) (Dkt. 503). On this basis, there are two principal Compact interpretation issues remaining for determination at trial. The Court's resolution of these issues of Compact interpretation will determine the contours of any declaratory relief to control the allocation of water moving forward.

First, the Court must determine the conditions that fix the "programmatic" apportionment of water below Elephant Butte Reservoir. The Special Master has already determined that the supply must be divided according to the 57%/43% ratio, but the question remains to be answered: "division of what?" To answer this question, the Special Master has determined that the Court must consider evidence to define a "baseline operating condition." *Id.* at 49. Those conditions define the "Project water supply" that must be split 57%/43%. *Id.* at 51.

Second, the Court must determine the nature and contours of the duties of New Mexico, Texas, and the United States that arise under the Compact with respect to the distribution of water beneath Elephant Butte Reservoir. The Special Master has determined that "New Mexico owes Texas a duty to not interfere with the Project delivery of Texas's Compact apportionment." Order, 46-47 (May 21, 2021) (Dkt. 503). New Mexico asserts that Texas has a reciprocal duty to prevent interference with delivery of New Mexico's Compact apportionment through the Rio Grande Project. The question for trial concerns the "details" of the "duty and what the states intended to Compact to protect." Order, 24 (May 21, 2021) (Dkt. 503). Resolution of those questions will "inform future administrative decisions" concerning the United States' operation of the Project, and the "United States has agreed it will be bound by any determination of the Supreme Court as to its obligations under the Compact and Project administration." Order, 15 (Mar. 31, 2020) (Dkt. 338).

Once the threshold issues of Compact interpretation are determined, the Court must determine whether there has been a Compact violation. The Special Master has recognized that an alleged shortfall to either New Mexico or Texas may be the result a "combination of factors, including the United States' Project operations; New Mexican, Texan, or Mexican surface or groundwater diversions; or maintenance failures." Order, 31 (Mar. 31, 2020) (Dkt. 338). The

Court must examine the "interplay of all of these factors" to determine whether there has been a Compact violation. *See Id.* at 29-30. Likewise, depletions in excess of the Compact apportionment in either state do not necessarily indicate a Compact violation. Groundwater pumping "at particular rates, in particular places, or at particular times" may not substantially affect Project operations or materially interfere with the delivery of the Compact apportionment to other state. *See* Order, 39 (May 21, 2021) (Dkt. 503).

Next, if the Court finds a violation, it must determine whether there is any injury. The Special Master has determined that the "propriety and necessity of injunctive relief remains to be determined based on the detailed resolution" of the issues concerning Compact interpretation, prior Compact violations, and proof of damages. *See Id.* at 53.

Finally, if the Court finds a violation by New Mexico that injured Texas, the Court must then resolve New Mexico's defenses. New Mexico's defenses to Texas's Complaint include: unclean hands; acceptance, waiver, or estoppel; latches; failure to mitigate; set off; and spill. *See* State of New Mexico's Answer to the State of Texas's Complaint (May 22, 2018); Order, 38-41 (Mar. 31, 2020) (Dkt. 338) (dismissing certain defenses). Likewise, New Mexico's defenses to the United States' Complaint in Intervention of ripeness; failure to mitigate; unclean hands; acceptance, waiver, or estoppel; and latches must be resolved. *See* State of New Mexico's Answer to the United States' Complaint in Intervention.

The Court must resolve all of the foregoing issues before it may determine liability. The measure of damages, if any, and appropriate remedy remain for resolution in the next trial phase.

II. STANDARD OF DECISION

A. Compact Interpretation

An interstate compact is both a contract between States and a law of the United States. *See Oklahoma v. New Mexico*, 501 U.S. 221, 235 n.5 (1991). As a result, the customary rules of

contract interpretation and statutory construction apply. *Tarrant Reg'l Water Dist. v. Herrmann*, 569 U.S. 614, 628 (2013); *New Jersey v. Delaware*, 552 U.S. 597, 610 (2008).

If the text of the Compact is unambiguous it is conclusive. *See, e.g., Kansas v. Colorado*, 514 U.S. 673, 690 (1995). In *New Jersey v. Delaware* the Court observed:

Interstate compacts, like treaties, are presumed to be the "subject of careful consideration before they are entered into, and are drawn by persons competent to express their meaning, and to choose apt words in which to embody the purpose of the high contracting parties."

552 U.S. at 615-16 (quoting *Rocca v. Thompson*, 223 U.S. 317, 332 (1912)). In interpreting a compact, the Court should give effect to every clause and every word. *Id.* at 611.

On the other hand, if the language of the Compact is ambiguous, it is appropriate to use extrinsic evidence to determine the compacting States' intent. *Oklahoma v. New Mexico*, 501 U.S. at 235 n.5. Reliable sources may include the negotiating history, *id.*; course of performance, *Alabama v. North Carolina*, 560 U.S. 330, 346 (2010) (explaining that the "parties' course of performance under the Compact is highly significant"); and customary practices employed in other interstate compacts, *Tarrant Regional Water District*, 569 U.S. at 633.

B. Burden of Proof to Establish a Compact Violation

A suit to enforce an interstate compact requires a preponderance of evidence establishing a violation. *See Kansas v. Colorado*, 514 U.S. 673, 693-94 (1995); *see also Nebraska v. Wyoming*, 507 U.S. 584, 592 (1993). Accordingly, in the instant case, the Texas, New Mexico, and the United States claims of Compact violation each require proof by a preponderance of the evidence.

C. Burden of Proof for Injunctive Relief

An injunction "is not a remedy which issues as of course." *See Montana v. Wyoming*, No. 137 Orig., Final Report of the Special Master (Jan. 10, 2018), at 116 (citing *Weinberger v. Romero-Barcelo*, 456 U.S. 305, 311 (1982)). The Court has found that "[t]he decision to grant or deny

permanent injunctive relief is an act of equitable discretion." *eBay Inc. v. MercExchange, L.L.C.*, 547 U.S. 388, 391 (2006). For the Court to enjoin a State from violating an interstate compact, there must also be a "cognizable danger of recurrent violation." *Kansas v. Nebraska*, 574 U.S. 445, 466 (2015) (internal citation omitted). A danger grounded in "mere possibility" or in "speculation" is not sufficient. *Montana*, No. 137 Orig., Final Report of the Special Master, at 117. In interstate disputes, the party seeking an injunction faces the burden to prove this danger by clear and convincing evidence because the "power to control the conduct of one State at the suit of another" is "extraordinary." *Connecticut v. Massachusetts*, 282 U.S. 660, 669 (1931).

III. THE COMPACT APPORTIONMENT

As noted, the threshold issues at trial entail interpreting the Compact to precisely define the Compact apportionment below Elephant Butte and the duties of each party to ensure that the apportionment is in fact made. New Mexico's case on these matters will be as follows.

A. Historical Project Operations Establish the Interstate Apportionment

1. The Principles that Define the Compact Baseline are Established by the Course of Performance

At summary judgment the Special Master determined that the Compact apportions water as between southern New Mexico and Texas in a "programmatic" manner through operation of the Rio Grande Project. Order, 5-6 (May 21, 2021) (Dkt. 503). Hence, the apportionment method is defined according to the specific principles by which the Compacting States understood the Project to operate when the Compact was negotiated:

- 1. The Project comprises 155,000 acres, of which 57% are situated in New Mexico and 43% are situated in Texas.
- 2. The Project is operated as a single unit to deliver water in satisfaction of irrigation demands on Project acreage and to make deliveries to Mexico.
 - a. All project acreage is treated the same, without regard for the State line.

- b. In times of shortage, all project acreage is entitled to order for delivery an equal amount of water.
- 3. The water that is available to deliver is called "Project supply." Project supply comprises "Usable Water," as defined in the Compact, in Project Storage plus tributary inflows into the system and usable return flows below Elephant Butte Reservoir.
- 4. The Project allocates water to Project acreage based on a "normal release" from Project storage of 790k acre feet per year, when sufficient water is available.
- 5. Conjunctive management of surface and groundwater is allowed in both States to meet irrigation demands on Project acreage.
- 6. Usable Water may be released to satisfy irrigation demands. Irrigation demands and the timing and magnitude of orders are variable across Project acreage. Farmers decide how much of their allocation to order and when to order it. Farmers decide what crops to grow.
- 7. All available Usable Water in Project storage is available for release to satisfy irrigation demands each year. Allocations that are not used are available to be reallocated the next year.
- 8. The Project is operated efficiently to minimize waste.

When the Project operates in accordance with these principles, both Texas and New Mexico water users receive an allocation that is commensurate with the equitable apportionment contemplated in the Compact. Project beneficiaries may order water up to the allocation to satisfy irrigation demands, and Reclamation's delivery of water to satisfy orders is tantamount to delivery of the States' respective equitable apportionments.

2. New Mexico's Evidence of the Compact Baseline

New Mexico will present evidence in support of its proposed "baseline" in four principal categories: (1) the plain language of the Compact; (2) the circumstances when the Compact was made; (3) the negotiation history of the compacting States; and (4) the course of performance.

a. Plain Language of the Compact

The Compact is fundamentally a contract that the Court must construe in accord with the compacting States' intent. *See Montana v. Wyoming*, 563 U.S. 368, 375 n.4 (2011). To discern

the parties' intent, the Court begins with the express terms. *Tarrant Reg. Water Dist.*, 569 U.S. at 628. The evidence will show that New Mexico's proposed baseline is concordant with the plain language of the Compact.

With respect to the apportionment below Elephant Butte Reservoir, the express terms of the Compact establish and protect a defined quantity of surface water supply for the Rio Grande Project. Once New Mexico makes its Article IV delivery into Elephant Butte Reservoir, the water becomes "usable water" in "project storage" that is "available for release in accordance with irrigation demands, including deliveries to Mexico." Rio Grande Compact of 1938, 53 Stat. 785, at Art. I (1939). The Compact provides for measurement of such releases with river gages below Elephant Butte and Caballo Reservoirs. *See id.* at Art. II(k)-(l). The intended "normal release" to satisfy irrigation demands is 790,000 acre feet per year, and Article VII and VIII establish mechanism that permits Texas to demand of Colorado and New Mexico and New Mexico to demand of Colorado releases of debit water in upstream storage as necessary to make the normal release. *See id.* at Arts. VII-VIII. The Compact contains no other terms explicitly governing the disposition of water below Elephant Butte.

However, the Compact supplies additional textual cues that support the compacting States' right to develop groundwater resources to supplement surface water irrigation. The definition of "usable water" states that water in Project storage (less credit water) is available for release to satisfy "irrigation demands." *Id.* at Art. I. Supplemental groundwater pumping for irrigation purposes on Project lands, even to the extent that it may affect return flows, is not inconsistent with this term. Article VIII's use of the term "normal," rather than "required" or "minimum," to describe the annual release recognizes that drought conditions may cause releases from Project storage to be less than the "normal" amount required to satisfy irrigation demands in any given

year. Likewise, the Compact does not describe a "maximum" release in any given period; instead, the terms governing the accounting of spills turn upon releases "in excess of current demand." *Id.*

b. Circumstances when the Compact Was Made

In Compact interpretation, the Court performs a "plain reading," informed by the "circumstances existing in the signatory states when the Compact was drafted." *See Montana v. Wyoming*, 563 U.S. 368, 386 (2011). The historical evidence of these circumstances support New Mexico's proposed interpretation.

The evidence will show that the ordinary and customary practices of Project operations were well established by the time that the Compact was negotiated. By 1938, the Rio Grande Project had been in operation for over twenty years and the construction of project facilities—including drains—was substantially complete. New Mexico expert Dr. Barroll will testify that the accounting records from this period indicate that deliveries generally track an equal-per-acre distribution of water as between Texas and New Mexico. Reclamation's operations during the pre-Compact period entailed operating the Project as a single unit without regard for the state line.

New Mexico's historian Dr. Stevens will testify that the pre-Compact circumstances indicate that no party considered groundwater to be part of the Project water supply. To begin, the water rights that Reclamation appropriated under New Mexico territorial law for the Rio Grande Project did not include groundwater, even though Reclamation's appropriations for other contemporaneous projects did. Reclamation's early reports on the Project do not mention groundwater, nor do other pre-Compact Reclamation records. The Rio Grande Joint Investigation also involved little study of groundwater below Elephant Butte Reservoir. The study budgeted very little for geological surveys below Elephant Butte Reservoir. Texas also objected to even a limited groundwater investigation below Elephant Butte. The principal concern of the Rio Grande Joint Investigation, below Elephant Butte, was not whether groundwater could provide an

additional source of water but whether the drains would lower the water table and prevent seeped lands.

At the same time, the evidence will show that groundwater was recognized as a potential source of supply for irrigation in the Rio Grande Valley. Early records indicate farmers in both New Mexico and Texas drilled wells and applied water for irrigation before the Project was constructed. Pre-Compact studies also indicated that supplemental groundwater could be a source of irrigation supply during droughts.

Finally, although the compacting States certainly understood that return flows were an important component of Project supply, Dr. Stevens will testify that their understanding of the relationship between groundwater extraction and surface flows was nascent. There is no evidence that the Compact negotiators understood that groundwater extraction must be capped or restricted to any specific level order in to maintain Project operations.

c. Negotiation History

The evidence will show that the compacting States indicated, in their negotiation of the Compact, an intent to protect existing uses of water below Elephant Butte Reservoir. The expert historians who will testify at trial, Dr. Stevens and Texas's Dr. Miltenberger, agree that both New Mexico and Texas expressed their intention to protect existing rights and that one purpose of the Compact was to protect existing rights in both States.

The contemporaneous evidence of negotiations also confirms that a principal intent of the Compact is protection of the Project's water supply. The States devoted significant effort to evaluating and negotiating an annual "normal release" of "Usable Water" from the Project that would be sufficient to meet "irrigation demands" in both States before agreeing on a "normal release" from the Reservoir of 790,000 acre feet per year. Further, abundant extrinsic evidence indicates that the States' understood that Reclamation would maintain certain established

principles of Project operations, including that all Project lands would be treated the same (equal water rights), regardless of which state they were located in. Texas Commissioner Clayton directly addressed the structure and effect of the Compact in this regard:

[T]he question of the division of the water released from Elephant Butte reservoir is taken care of by contracts between the districts under the Rio Grande Project and the Bureau of Reclamation. These contracts provide that the lands within the Project have equal water rights, and the water is allocated according the areas involved in the two States. By virtue of the contract recently executed, the total area is 'frozen' at the figure representing the acreage now actually in cultivation: approximately 88,000 acres for Elephant Butte Irrigation District, and 67,000 for the El Paso County Water Improvement District No. 1, with a 'cushion' of three per cent for each figure.

NM-2119. Commissioner Clayton later explained that it was understood that "all the lands in the Project have equal water rights, and the acreage to be irrigated is practically 'frozen' at its present figures." JT-0458.

d. Course of Performance

A "'part[y's] course of performance under [a] Compact is highly significant' evidence of its understanding of the Compact's terms." *Tarrant Reg'l Water Dist.*, 569 U.S. at 636. Here, the course of performance confirms New Mexico's proposed definition of the baseline.

The evidence will confirm the compacting States understood the Compact did not require agricultural practices, irrigation practices, or other development to remain static. The Rio Grande Compact Commission ("RGCC") adopted Compact Rules at the first annual meeting of the Rio Grande Compact Commission in 1939 that expressly contemplates continued development:

A Compact, known as *the Rio Grande Compact*, between the States of Colorado, New Mexico and Texas ... which equitably apportions the waters of the Rio Grande above Fort Quitman and *permits each State to develop its water resources* at *will, subject only to its obligations to deliver water in accordance with the schedules set forth in the Compact*, the following Rules and Regulations have been adopted for its administration by the Rio Grande Compact Commission ...

JT-0336. The compacting States understood that each State was at liberty "to develop its water

resources at will," including its groundwater resources. *Id.* This language has remained in force until the present day, published in every RGCC annual report, with no edits or revisions.

Concordant with this provision, the historical evidence will show that the Texas and New Mexico irrigation districts, with Reclamation's knowledge and approval, developed extensive groundwater resources during the first post-Compact drought to satisfy irrigation demands within the Project. The evidence will show that that, in the late 1940s, Reclamation warned New Mexico and Texas farmers that Project reservoir levels were low and that Project surface water supply may be inadequate to satisfy irrigation demand. New Mexico's expert Dr. Barroll will testify that, in response, farmers throughout the Project drilled irrigation wells. The historical evidence indicates that Reclamation supported this practice. For example, the districts' records indicate that Reclamation instituted policies to permit farmers to convey pumped groundwater through the irrigation system and encouraged farmers with access to high-capacity groundwater wells to transfer their surface water allocations to those without groundwater access. By the 1960s and 1970s, Reclamation encouraged the districts to develop district-owned groundwater facilities.

The historical evidence will also show that Reclamation and the States were each aware of these developments and had an increasing understanding of the effects of this pumping on return flows. For example, the 1952 Reclamation water announcement reported that low Project Supply in that year would be "supplemented by the flow from several hundred private irrigation wells and utilization of available return flow." NM-1656. A 1956 report also recorded that "[t]he main source of irrigation water through the past year has been the farm wells as the storage carry over and the ensuing run off was extremely subnormal." JT-0236. District records indicate regular reports to Reclamation concerning the number of wells in operation. *See, e.g.,* NM-0176, 106. Meanwhile, scientific advances in the study of the hydrologic connections between groundwater

and surface water continued. The evidence will show that by publication of the Conover report (JT-0444), the parties understood that there exists a complex causal relationship between increased groundwater pumping and reduced return flows throughout the Project area. The specifics of that relationship continued to be a subject of study throughout the drought.

Despite this knowledge, the evidence will show that no party objected to the increase in groundwater extraction for Project purposes. To the contrary, when New Mexico declared the Lower Rio Grande Groundwater Basin and placed restrictions on groundwater use in New Mexico in 1982, Texas Compact Commissioner Jesse Gilmer encouraged the New Mexico Compact Commissioner and State Engineer Steve Reynolds to reconsider. Texas Commissioner Gilmer explained that agriculture in the region effectively requires access to groundwater access. E.g., NM-0405. Dr. Stevens will testify that the historical record offers no indication of any concern expressed by the parties regarding pumping or whether pumping groundwater would constitute a Compact violation. Instead, the historical evidence confirms that Reclamation encouraged the districts to develop a system of conjunctive management of both groundwater and surface water to satisfy irrigation demands.

One manifestation of this conjunctive use regime is Reclamation's development of the D2 allocation methodology. In the early 1980s, Reclamation developed a new allocation methodology to divide Project supply between Elephant Butte Irrigation District ("EBID") and El Paso County Water Improvement District No. 1 ("EPCWID"), rather than to individual farms. To develop this methodology, Reclamation analyzed historical water distribution data from 1951 to 1978. This resulted in the D1 and D2 Curves, which Reclamation used to determine allocations to EBID, EPCWID, and Mexico until approximately 2006. The resulting allocation system does not represent project efficiency as it would have existed in 1938. Rather, the D2 allocations reflect

actual operations through the years 1951 to 1978, including pumping impacts. As such, acceptance of this allocation method by Reclamation, the districts, and the compacting States is consistent with a common understanding that the Compact permits groundwater pumping for supplemental irrigation purposes. Indeed, even the allocation method after 2006, as memorialized in the 2008 Operating Agreement ("2008 OA"), incorporates the D2 curve. This is significant because the 2008 OA professes to be consistent with the Compact.

B. New Mexico Accedes to the D2 Curve as Roughly Consistent with the Protected Baseline of Project Operations and the Compact Apportionment

The "baseline" that New Mexico proposes and that the extrinsic evidence supports is not a strict depletion limit or inflow-outflow model, but rather a set of required of Project operations that result in a range, depending on hydrological conditions, of available water allocations to water users in Texas and New Mexico. To the extent that this allocation requires mathematic definition, New Mexico will accede to the D2 Curve as the appropriate and historically accepted method to determine the total available Project water supply that may be diverted in both Texas and New Mexico for a given level of usable water in storage that is available for release.

Project operations during the D2 data period (i.e., 1951 to 1978) largely conformed with the "baseline" conditions New Mexico proposes. Accordingly, New Mexico's expert Mr. Lopez will testify that the relationship between releases and diversions that the D2 Curve represents broadly corresponds with the programmatic apportionment that the Compact requires. Moreover, the evidence of Project operations from approximately 1980 onward, including the 2008 OA period, indicates that all parties accepted the D2 Curve as concordant with the Compact.

C. The 1938 *Depletion* Condition Proposed by Texas is Inconsistent with the Principles Governing the Allocation and Apportionment of the Waters of the Rio Grande below Elephant Butte

Texas takes the position that the Compact imposes a "1938 Condition" as the "baseline"

that defines the apportionment below Elephant Butte Reservoir. More specifically, Texas will present expert evidence establishing what is, effectively, a depletion limit (the "1938 Depletion Condition"). Using a double-mass curve that tracks releases from the reservoir against deliveries at the El Paso narrows for the period prior 1950, Texas will argue, through its experts, that Texas's apportionment is whatever amount of water would have reached Texas for a given release under the hydrological conditions in play pre-1950 (which Texas claims is a 1938 condition). This argument is fundamentally flawed and finds no basis in the Compact.

The plain language of the Compact offers no support for Texas. Texas is asking the Court to ignore the differences in the plain wording of the Compact, between the inflow-outflow/index gage provisions of Articles III and IV, and the obvious lack of such provisions below Elephant Butte Reservoir.

The extrinsic evidence will confirm this omission was intentional. Texas Commissioner Clayton explained, shortly after the Compact was executed, that "[o]bviously, neither Colorado nor New Mexico could be expected to guarantee any fixed deliveries at the Texas state line when the operation of the dam is not within their control." NM-2119. The States relied upon the Project to apportion the waters.

Nor does the negotiating history lend support to Texas' position. The contemporaneous historical evidence will show, contrary to Texas' proposed depletion condition, that all parties expected and anticipated continued development below Elephant Butte Reservoir.

Finally, the parties' course of performance makes it clear the States did not understand or intend the Compact to impose a 1938 Depletion Condition. The Project and its operations have continued to evolve throughout the Project's more than 100 years of history. New Mexico's experts Dr. Barroll and Mr. Lopez will testify to multiple significant changes in Project

operations and infrastructure that demonstrate no party intended to maintain a 1938 condition:

- Completion of the Rectification and Canalization projects;
- Proliferation of groundwater wells in both States and in Mexico;
- Project acreage buildout through the early 1950s then reduction in irrigated acreage;
- Changes in on-farm irrigation efficiencies;
- Changes in crop mix;
- Urbanization of Project area;
- Growth of municipal water demands with significant amounts of that demand being supplied by the Project;
- Significant Project accounting changes;
- Infrastructure changes (e.g., construction of the American Canal and its Extension);
- Designation of wastewater treatment plant treated effluent as non-Project water (in Texas only);
- Transfer of ownership and operation of Project infrastructure from Reclamation to the Districts; and
- Significantly modified Project operations and accounting practices under the 2008 OA.

No party indicated, despite the various effects of these changes on depletions and Project efficiency, that a 1938 Depletion Condition was required before Texas fabricated the argument for this lawsuit. To the contrary, as discussed in detail above, the evidence will show that Project allocations have been made for seventy years using a methodology that incorporates, through the D2 Curve, changing hydrological conditions, including conjunctive groundwater use.

D. Both States Have a Compact Duty to Prevent Water Users Within Their Jurisdictions from Interfering with Baseline Project Operations

New Mexico agrees that the parties to the Compact owe one another Compact-level duties to protect the "baseline Project operations." As a result, "if those states . . . fail to enforce laws or control individual water uses within their states, then the other Compact signatory states may sue the non-compliant state generally for redress and leave to the offending state the problem of administering the relative rights of its own citizens." Order, 35 (Mar. 31, 2020) (Dkt. 338).

The evidence at trial will show that New Mexico has satisfied its duties under state law to control water use in the Lower Rio Grande and protect Project operations. New Mexico's witnesses will testify to New Mexico's extensive regulatory regime to manage groundwater in the Lower

Rio Grande and prevent unauthorized depletions. Among other things, the New Mexico Office of the State Engineer (1) meters all irrigation and municipal groundwater diversions(2) requires permits and offsets for all new groundwater appropriations in declared groundwater basins, (3) enforces water rights and prevents waste and excessive or illegal use, (4) prepares hydrographic surveys to support water rights adjudications, and (5) tracks all water use and reports such use in a public database.

New Mexico has exercised these administrative authorities in a manner consistent with the Compact. In 1980 and 1982, the New Mexico State Engineer proactively declared the Lower Rio Grande Underground Water basin. Since then, New Mexico has not permitted any new groundwater depletions unless fully offset. Shortly thereafter, New Mexico began adjudicating water rights in the Lower Rio Grande to determine relative rights and priorities in the basin and facilitate administration. Through that proceeding, the Office of the State Engineer has conducted hydrographic surveys of the entire basin to provide detailed and accurate information regarding water uses. The evidence will also show that New Mexico has implemented following measures to govern and control water use in a manner that complies with the obligations of the Compact.

In contrast, witnesses representing the Texas Commission on Environmental Quality, the Texas Water Development Board, and EPCWID will confirm that Texas has effectively no regulatory system in place to control groundwater use and other depletions from the Texas portion of the Project area. As a result, groundwater extraction in Texas has grown unchecked and had numerous negative impacts on Project performance in Texas, as discussed in Section V.B, below. The inference from this evidence is plain: whatever duties Texas had to protect Project operations and safeguard return flows for use to satisfy irrigation demands have been breached.

IV. WHETHER THE STATES HAVE COMPLIED WITH THE COMPACT APPORTIONMENT

As the evidence will show, New Mexico has not received its Compact apportionment since 2006, whereas Texas received its full apportionment in all years after 1985 except 2003 and 2004.

A. New Mexico Has Not Received Its Apportionment since 2006

Reclamation adopted changes to Project allocation and accounting since 2006 that have negatively affected New Mexico's Compact apportionment and the Project as a whole.

1. Starting in 2006, Reclamation Changed the Project's Allocation Method to New Mexico's Detriment

Since 2006, Reclamation has operated the Project under new allocation and accounting methods that have significantly reduced EBID's Project allocation and therefore how New Mexico receives its Compact apportionment below Elephant Butte. These changes are the D3 Allocation, Carryover, and several accounting methods that benefit EPCWID at EBID's expense. These changes were all later adopted in the 2008 Operating Agreement.

Dr. Barroll and others will testify Reclamation first applied the "D3 Allocation" method in 2006. This new allocation method reduces EBID's allocation to account for all negative departures from the D2 Curve. Under the D3 Allocation, Mexico and EPCWID are allocated water according to the D1 and D2 Curves, with EBID receiving whatever water remains. The D3 Allocation assumes all recent negative departures from the average Project performance reflected in the D2 curve are caused by New Mexico. This assumption was never supported by any analysis, and New Mexico's evidence at trial will show that it is incorrect.

As Dr. Barroll will explain, there are other reasons for the negative departure, including groundwater pumping in Texas and Mexico, changed Reclamation accounting methods, physical changes to Project infrastructure, operational changes, and the effects of growing municipal use in Texas. New Mexico's hydrology expert, Mr. Sullivan, will explain the results of New Mexico's

Integrated Model, which demonstrate that groundwater pumping in New Mexico is not the sole cause of negative departures from the D2 Curve.

Also in 2006, Reclamation implemented "Carryover" for the first time. Carryover allows EPCWID or EBID to carry over their unused allocations in any given year to the following year. Dr. Barroll will demonstrate that this method diverged from decades of historical practice. Prior to 2006, Reclamation operated on a single-year accounting basis, so unused allocations at the end of one year may be reallocated to the districts and Mexico in the next.

Project accounting records will indicate EBID has only carried over small amounts of water, in large part because EBID's D3 allocations have been insufficient to meet EBID's irrigation demands. EPCWID, on the other hand, is able to utilize Carryover because its demands are lower in many years than its allocation, and various accounting credits allow it to divert other sources of water, such as municipal effluent, free of charge. As a result, EPCWID has carried over large amounts of water in some years. For instance, in 2009 EPCWID reached its Carryover limit of 232,915 acre-feet. This gave EPCWID a total allocation for 2009 of 552,997 acre-feet, whereas EBID was allocated only 345,817 acre-feet—a far cry from the required 57%/43% division.

Dr. Barroll will also testify that carryover accounts do not reflect actual wet water in storage. A district may carry over its allocation regardless of whether the reservoir contains sufficient water to deliver that allocation. Carryover accounts also are not reduced for evaporation. As such, new inflows to Project storage must first meet the carryover obligation before Reclamation can make new allocations. In practice, this gives EPCWID a superior right to some inflows to the Project, to EBID's detriment.

Dr. Barroll will testify that Reclamation has modified Project accounting in ways that cause artificial departures from the D2 curve and, accordingly, reduce EBID's allocation. For example,

Reclamation once counted EPCWID's use of effluent discharged by El Paso Water Utilities ("EPWU") as a Project delivery to EPCWID. Now it does not, making it appear as though EPCWID receives less water than it formerly did. EPWU's municipal effluent contains Project return flows during the irrigation season, and EPCWID should be charged for its use.

2. The Post-2006 Allocation Method Prevents New Mexico from Receiving its Compact Apportionment and Negatively Impacted the Project

These changes to Project allocation and accounting methods have reduced New Mexico's Compact apportionment. As Dr. Barroll will explain and the New Mexico model will show, the D3 Allocation has reduced EBID's full-supply allocation by approximately one-third. EBID's full-supply allocation has dropped from 495,000 acre-feet to less than 330,000 acre-feet. EBID's yearly allocation has averaged 44% of the total Project supply, whereas New Mexico's apportionment 57%.

Dr. Barroll will explain that the 2008 OA has also negatively affected the efficiency of the entire Project. Because the 2008 OA has reduced EBID's share of Project supply, even during full-supply years, below the amount needed to supply EBID's lands, EBID farmers must pump greater amounts of groundwater to meet irrigation demands. The reduction in EBID's share of Project water reduces the amount of recharge to the aquifer in the Rincon and Mesilla Valleys because less surface water is applied to fields in EBID. Shallow groundwater levels have dropped during low supply years but have not recovered in the full-supply years that follow. The combined effect ("double-whammy") of reduced recharge and increased groundwater pumping under the 2008 OA threatens the sustainability of the aquifer. The testimony at trial will confirm that the 2008 OA drastically changed Project operations without any technical analysis, and without regard to the long-term effects to New Mexico.

B. Texas Has not Been Injured

1. Water Use in New Mexico Has Remained Stable or Declined

Contrary to the allegations of Texas and the United States, total water use in the Lower Rio Grande in New Mexico has not expanded in recent years; it has been relatively stable or even declined. Mr. Sullivan will testify that since its peak in the 1950s, total irrigated acreage within EBID has fallen by 25%, or 23,000 acres, to its current level of about 70,000 acres. Also, "total applied water" in EBID, which includes both deliveries of Project water and supplemental pumping, has actually declined slightly since the 1980s.

As discussed above, Messrs. Lopez, Serrano, and D'Antonio will testify that sustainable water use in New Mexico is the result of regulated groundwater use within the NM portion of LRG since 1980. There are no similar mechanisms in Texas.

2. Texas Received its Full Entitlement in All but Two Years

From 1985 through 2002 and in 2005, Texas (and New Mexico) enjoyed a full supply of Project water. In full supply years, the Districts receive their maximum allocations, and New Mexico's and Texas's equitable apportionments are satisfied. Although the exact figures of full-supply allocations varied very slightly over the years, multiple witnesses will confirm that Reclamation and the Districts have repeatedly recognized that EBID and EPCWID received the greatest allocations possible each year from 1985 to 2002. In fact, Reclamation made full supply allocations available to the Districts in all but two years, 2003 and 2004, from 1985 to 2006.

The United States' witnesses will admit that Reclamation determined in 1990 that a release of 763,842 acre-feet per year from Project Storage constated full supply. US-0299, 8. Reclamation determined that this release from Project Storage would provide 931,841 acre-feet per year of divertible water at U.S. and Mexico canal headings. US-0141, 4. According to Project allocation procedures at that time, after deducting Project storage for delivery to Mexico, Reclamation then

calculated a full-supply allocation of 376,862 acre-feet per year to EPCWID and 494,979 acre-feet per year to EBID in accordance with the percentages set out in the 1938 Downstream Contract. *Id.* at 4-5. Reclamation determined this was the amount of water needed for the Districts to deliver 3.024 acre-feet to each acre of Project lands. Under these procedures¹, each of the years 1985 through 2002 and 2005 were years of full-supply for EPCWID. NM-1036, EPCWID. Therefore, in all but two years (2003 and 2004) from 1985-2006, EPCWID received its full Project allocation, and Texas received its full Compact apportionment.

3. In All But a Few Years, Texas Left Over 20,000 Acre-Feet of Water Unused in the Reservoir

EPCWID also left significant portions of its allocation uncalled for and unused. As Mr. Lopez will explain, from 1985 to 2016, and only considering those years in which EPCWID did not receive a full supply, EPCWID did not call for all of the water allocated to it in all but six years (2003, 2004, 2011, 2012, 2013 and 2014). In most years EPCWID left more than 20,000 acre-feet of unused water in Project Storage and, even in some non-full supply years, EPCWID left significant amounts of water in storage. In 2006, EPCWID left over 60,000 acre-feet in storage.

Texas can show no harm if its failure to receive water was due to its own failure to order its entire allocation.

4. Since 2006, Texas Received Significantly More Water than It Is Entitled to Receive under the Compact

Since 2006, EPCWID has received significantly more water than it is entitled to receive under the Compact. *See* Section IV.A, *supra*. As Dr. Barroll will testify, under the D3 Allocation alone, even without Carryover, EPCWID's current-year allocation in full supply years has

_

¹ Between 1985 and 1990, before Reclamation had finalized their allocation analysis, Reclamation's full-supply year determinations for EPCWID varied slightly from, but were consistent with, the 376,842 acre-feet per year Reclamation determined in 1990 was a full supply to EPCWID. *Barroll Expert Report* at A-14.

increased from 377,000 acre-feet per year to an average of 391,500 acre-feet per year. Including Carryover, EPCWID's total annual allocation has exceeded 500,000 acre-feet in some years. By contrast, in full-supply years under the 2008 OA, EPCWID's charged diversions—Project water EPCWID actually ordered and received—have averaged less than 300,000 acre-feet per year. This large disparity between EPCWID's Project allocation and actual demand has left large amounts of water in Project storage, inflating EPCWID's Carryover account and reducing EBID's allocation.

5. Texas Has Suffered no Economic Injury

Texas has not taken the position that the surface water entering Texas from New Mexico has been degraded in quality by New Mexico in violation of the Compact. Texas recognizes that gradual diminishment in quality, as one proceeds with multiple diversions and return flows downstream in the Rio Grande Project, is a natural and unavoidable phenomenon. The only injury Texas alleges relating to water quality is that which Texas alleges occurs as a result of Texas farmers being forced to use local, more saline groundwater to make up for allegedly diminished Project surface water deliveries.

Texas has indicated that it intends to present, in this trial phase, the testimony of Dr. David Sunding concerning alleged agricultural, urban and statewide economic injury to Texas as a result of groundwater pumping in New Mexico. The theory that Dr. Sunding adopts is that a shortage of surface water caused by New Mexico pumping has forced Texas farmers to rely more on local, more saline groundwater than they otherwise would have. In turn, according to Dr. Sunding, crop production suffered, and farmers chose not to plant the more valuable crop of pecans.

However, Texas's own expert, Dr. Leonardo Lombardini, found no signs of negative salinity effects on crops in Texas. In designated deposition testimony, Dr. Lombardini admitted that his field visit to pecan orchards in Texas led him to the opinion that the leaf health of the pecans he observed in Texas was "very good." There was no visual damage and laboratory

leaf analysis confirmed the levels of sodium were acceptable. Dr. Lombardini was also of the opinion that the water quality of the surface water downstream in Texas is due largely to the municipal effluent flows and local drain flows in the El Paso area of Texas.

Dr. Sunding offers two methods to calculate alleged economic injury to agriculture in Texas. Both methods focus on purported damages concerning pecans—a crop Dr. Sunding selects based on his opinion that it is the most profitable crop. One is based on actual data concerning crops planted during the years 1985-2016 (his "historical acreage" method). The other is based on a "multinomial logit" behavioral choice model created by Dr. Sunding. This latter method is not based on actual observed data, and New Mexico will show that it is entirely speculative, unreliable and unsound.

The evidence will also show that Dr. Sunding's calculations of alleged economic harm are flawed by double accounting, inappropriate data choices, miscalculations, oversimplifications and the failure to recognize other factors that impact crop planting decisions and productivity, for example, soil characteristics and limitations, and the impacts of urban expansion within Texas. Dr. Sunding also ignores the real-world evidence that the acreage of pecan trees in Texas has been steadily increasing over the period he analyzed.

Dr. Sunding's estimates of alleged urban and regional damages are equally unsound, and are again based on speculation, oversimplifications, and a failure to recognize other relevant factors. In any event, the evidence will show that ultimately, Dr. Sunding's calculations are moot, because when his estimations are processed through the regional economics software program he himself uses (IMPLAN – Impact analysis for PLANing), contrary to suffering economic loss, Texas has in fact benefitted economically.

V. EVIDENTIARY ISSUES

A. The Court Should Rely on the NMILRG Model

New Mexico's modeling experts will testify that, in order to understand whether groundwater pumping and other practices within the Project area have impacted historical Project deliveries, it is necessary to develop and apply a robust simulation model of the entire Project. To this end, New Mexico's Integrated Model simulates Project operations and is capable of adjusting allocations, releases, and deliveries based on simulated changes in Project storage, the volume of return flows (whether originating in Texas or New Mexico) reaching the river, seepage from the river as well as Project conveyance structures, and municipal demands, among other factors. The Integrated Model reflects, for example, how an increase in return flows and decrease in seepage from the river prompts Reclamation to release less water to meet Project orders, resulting in increased Project storage but also increased evaporation from Project storage. This reflects how Reclamation has historically operated the Project and how it operates the Project now.

The Texas Model, by contrast, robotically simulates the same Project allocations and releases every year, even in model scenarios that simulate very different conditions than those occurring historically. These false assumptions result in significant overestimations of the amount of water the Project releases in many years, which the Texas Model simulates flowing entirely into Texas, even in years when EBID received less than a full allocation or when Texas has no demand for the additional water. The Texas Model's results are unrealistic and wasteful, reflect inflated estimates of the amount of water Texas would have received under alternative conditions, and do not reflect how Reclamation has historically operated the Project. The Texas Model also fails to simulate the Hueco Bolson, and therefore fails to simulate water use in most of EPCWID, as well as water use in Mexico that is hydrologically connected to the Rio Grande. The Texas Model's failure to extend its study area below the El Paso gage belies these bedrock principles of Project

operation.

B. Actions in Texas Impact New Mexico's Compact Apportionment

While Texas concedes that its water use in the Mesilla Bolson may impact New Mexico, it has argued that its water use in the Hueco Bolson does not have upstream impacts because it is not hydrologically connected to water use in New Mexico. This is incorrect. Texas ignores that the Project connects actions in Texas that deplete Project storage to the allocation and delivery water from Project storage to New Mexico. The evidence in this case will show that, through a variety of means, Texas has reduced Project efficiency within its borders and eliminated water supplies within Texas that once satisfied water demands and were accounted as Project deliveries. These actions have caused Texas to call for more water from the Project to meet its demands, reducing the amount of water available for allocation to New Mexico and impairing New Mexico's Compact apportionment.

Return flows generated within Texas were historically an important component of the Project supply to EPCWID, particularly in the southern reaches of EPCWID. The evidence will reflect that, at the time of the Compact, return flows from upstream Texas uses constituted a significant portion of the water supplied to the southern portion of EPCWID, and Reclamation considered these diversions part of EPCWID's Project allocation. They also constituted the large majority if not all of the supply for the Hudspeth County Conservation and Reclamation District. By eliminating the use of these return flows through a combination of groundwater pumping, municipal transfers, and changes to Project infrastructure and accounting, Texas eliminated this component of its Project supply. Similarly, groundwater pumping in Texas directly intercepts water from the Rio Grande, as well as Project Canals, laterals and drains. This can negatively impact deliveries to both Texas and Mexico. Seepage caused by Texas groundwater pumping cause Texas farmers to order more water than they did historically to meet their crop demands.

The evidence will show that, in the short term, Texas offsets some of the impacts of its pumping with municipal effluent. However, this creates its own problems. First, as discussed above, Dr. Barroll and other witnesses will testify that effluent contains a component of Project return flows for which Reclamation does not charge EPCWID. Second, New Mexico has no assurance these offsets will continue. If EPWU finds a new use for its effluent or decreases withdrawals from the Hueco Bolson for any reason, the impacts of Texas's pumping will become much more pronounced. Texas must be required to measure all its groundwater pumping and fully account for all use of return flows within EPCWID.

VI. CONCLUSION

At the conclusion of trial, New Mexico will ask that the Court enter judgment in its favor on liability with respect to all of Texas's and the United States' claims against it; enter a decree interpreting the Compact in accord with New Mexico's proposal; and enter judgment against Texas in its favor on the counterclaims. New Mexico will reserve for the next phase of trial a determination of damages.

Dated: September 27, 2021

Respectfully submitted,

By: <u>/s/ Jeffrey J. Wechsler</u> Jeffrey J. Wechsler

HECTOR H. BALDERAS New Mexico Attorney General CHOLLA KHOURY Assistant Attorney General ZACHARY E. OGAZ Assistant Attorney General

P.O. Drawer 1508 Santa Fe, New Mexico 87501 505-239-4672

JEFFREY J. WECHSLER
Special Assistant Attorney General
SHELLY L. DALRYMPLE
KALEB W. BROOKS
MONTGOMERY & ANDREWS, P.A.
325 Paseo de Peralta
Santa Fe, NM 87501
jwechsler@montand.com
505-986-2637

JOHN B. DRAPER
Special Assistant Attorney General
CORINNE E. ATTON
DRAPER & DRAPER LLC
325 Paseo de Peralta
Santa Fe, NM 87501
john.draper@draperllc.com
505-570-4591

MARCUS J. RAEL, JR.*
LUIS ROBLES
SUSAN BARELA
Special Assistant Attorneys General
Robles Rael & Anaya
500 Marquette Ave NW #700
Albuquerque, NM 87102
marcus@roblesrael.com
505-242-2228

*Counsel of Record

BENNETT W. RALEY
LISA M. THOMPSON
MICHAEL A. KOPP
Special Assistant Attorneys General
TROUT RALEY
1120 Lincoln Street, Suite 1600
Denver, Colorado 80203
303-861-1963

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

This is to certify that on September 27, 2021, I caused a true and correct copy of the **State of New Mexico's Trial Brief** to be served by e-mail and U.S. Mail upon the Special Master and by e-mail upon all counsel of record and interested parties on the Service List, attached hereto.

Respectfully submitted this 27th day of September, 2021.

/s/ Michael A. Kopp

Michael A. Kopp Special Assistant Attorney General TROUT RALEY 1120 Lincoln Street, Suite 1600 Denver, Colorado 80203 (303) 861-1963

SPECIAL MASTER

HONORABLE MICHAEL J. MELLOY

Special Master TXvNM141@ca8.uscourts.gov (319) 432-6080 United States Circuit Judge

111 Seventh Avenue, S.E., Box 22 (service via email and U.S. Mail) Cedar Rapids, IA 52401-2101

MICHAEL E. GANS

TXvNM141@ca8.uscourts.gov Clerk of the Court (314) 244-2400

United States Court of Appeals - Eighth Circuit Thomas F. Eagleton United States Courthouse 111 South 10th Street, Suite 24.329

St. Louis, MO 63102

MEDIATOR

HON. OLIVER W. WANGER (USDJ RET.) owanger@wjhattorneys.com

WANGER JONES HELSLEY PC (559) 233-4800 Ext. 203 265 E. River Park Circle, Suite 310

Fresno, California 93720

DEBORAH L. PELL (Paralegal) dpell@whjattorneys.com

UNITED STATES

BRIAN H. FLETCHER* supremectbriefs@usdoj.gov

(202)514-2217 Acting Solicitor General

TODD KIM

Assistant Attorney General

EDWIN S KNEEDLER

Deputy Solicitor General

FREDERICK LIU

Assistant to the Solicitor General U.S. DEPARTMENT OF JUSTICE

950 Pennsylvania Avenue, NW

Washington, DC 20530-0001

JAMES J. DUBOIS* james.dubois@usdoj.gov

R. LEE LEININGER (303) 844-1375 U.S. DEPARTMENT OF JUSTICE lee.leininger@usdoj.gov (303) 844-1364

Environment & Natural Resources Division

999 18th Street

South Terrace – Suite 370

Denver, Colorado 80202 Seth.allison@usdoj.gov

(303)844-7917 SETH C. ALLISON, Paralegal

JUDITH E. COLEMAN JENNIFER A. NAJJAR

U.S. DEPARTMENT OF JUSTICE Environment & Natural Resources Division P.O. Box 7611 Washington, D.C. 20044-7611 Judith.coleman@usdoj.gov (202) 514-3553 jennifer.najjar@usdoj.gov (202) 305-0476

STATE OF NEW MEXICO

HECTOR H. BALDERAS

New Mexico Attorney General

TANIA MAESTAS

Chief Deputy Attorney General

CHOLLA KHOURY

Assistant Attorney General

ZACHARY E. OGAZ

Assistant Attorney General STATE OF NEW MEXICO

P.O. Drawer 1508

Santa Fe, New Mexico 87501

PATRICIA SALAZAR - Assistant JENNIFER VAN WIEL - Paralegal hbalderas@nmag.gov tmaestas@nmag.gov ckhoury@nmag.gov zogaz@nmag.gov psalazar@nmag.gov jvanwiel@nmag.gov (505) 239-4672

MARCUS J. RAEL, JR.* LUIS ROBLES

SUSAN BARELA

Special Assistant Attorneys General ROBLES, RAEL & ANAYA, P.C. 500 Marquette Avenue NW, Suite 700 Albuquerque, New Mexico 87102 CHELSEA SANDOVAL - Paralegal PAULINE WAYLAND – Paralegal marcus@roblesrael.com
luis@roblesrael.com
susan@roblesrael.com
chelsea@roblesrael.com
pauline@roblesrael.com
bonnie@roblesrael.com
(505) 242-2228

BENNETT W. RALEY LISA M. THOMPSON

MICHAEL A. KOPP

Special Assistant Attorneys General

TROUT RALEY

1120 Lincoln Street, Suite 1600

BONNIE DEWITT – Paralegal

Denver, Colorado 80203

braley@troutlaw.com lthompson@troutlaw.com mkopp@troutlaw.com (303) 861-1963

JEFFREY WECHSLER

jwechsler@montand.com

SHELLY L. DALRYMPLE KALEB W. BROOKS

Special Assistant Attorney General MONTGOMERY & ANDREWS

325 Paseo De Peralta Santa Fe, NM 87501

DIANA LUNA – Paralegal

dluna@montand.com

(505) 986-2637

<u>sdalrymple@montand.com</u><u>kwbrooks@montand.com</u>

JOHN DRAPERjohn.draper@draperllc.comCORINNE ATTONcorinne.atton@draperllc.com

Special Assistant Attorney General DRAPER & DRAPER LLC

325 Paseo De Peralta Santa Fe, NM 87501

DONNA ORMEROD – Paralegal

(505) 570-4591

donna.ormerod@draperllc.com

STATE OF COLORADO

PHILIP J. WEISER

Attorney General of Colorado

ERIC R. OLSON

Solicitor General

LAIN LEONIAK

Acting First Assistant Attorney General

CHAD M. WALLACE*
Senior Assistant Attorney General

PRESTON V. HARTMAN
Assistant Attorney General

COLORADO DEPARTMENT OF LAW

Ralph Carr Judicial Center

7th Floor

1300 Broadway

Denver, CO 80203

NAN EDWARDS, Paralegal II

eric.olson@coag.gov

chad.wallace@coag.gov

(720) 508-6281 (direct)

preston.hartman@coag.gov (720) 508-6257 (direct)

nan.edwards@coag.gov

STATE OF TEXAS

STUART SOMACH*
ANDREW M. HITCHINGS
ROBERT B. HOFFMAN
FRANCIS M. GOLDSBERRY II
THERESA C. BARFIELD
SARAH A. KLAHN
BRITTANY K. JOHNSON
RICHARD S. DEITCHMAN
SOMACH SIMMONS & DUNN, PC

ssomach@somachlaw.com
ahitchings@somachlaw.com
rhoffman@somachlaw.com
mgoldsberry@somachlaw.com
tbarfield@somachlaw.com
sklahn@somachlaw.com
bjohnson@somachlaw.com
rdeitchman@somachlaw.com
(916) 446-7979

500 Capital Mall, Suite 1000

Sacramento, CA 95814-2403

CORENE RODDER - Secretary CRYSTAL RIVERA - Secretary

YOLANDA DE LA CRUZ - Paralegal

(916) 803-4561 (cell)

crodder@somachlaw.com crivera@somachlaw.com

ydelacruz@somachlaw.com

KEN PAXTON

Attorney General of Texas

BRENT WEBSTER First Assistant Attorney General

GRANT DORFMAN

Deputy First Assistant Attorney General

SHAWN COWLES

Deputy Attorney General for Civil Litigation

WILLIAM F. COLE

Assistant Solicitor General

BEAU CARTER

Assistant Solicitor General

PRISCILLA M. HUBENAK

Chief, Environmental Protection Division

OFFICE OF ATTORNEY GENERAL

OF TEXAS

P.O. Box 12548

Austin, TX 78711-2548

(512) 463-2012

(512) 457-4644 Fax

Priscilla.Hubenak@oag.texas.gov

jcbrockmann@newmexicowaterlaw.com

administrator@newmexicowaterlaw.com

ifstein@newmexicowaterlaw.com

AMICI / FOR INFORMATIONAL PURPOSES ONLY

ALBUQUERQUE BERNALILLO COUNTY WATER UTILITY AUTHORITY

JAMES C. BROCKMANN*

JAY F. STEIN

STEIN & BROCKMANN, P.A.

P.O. Box 2067

Santé Fe, New Mexico 87504

Administrative Copy

PETER AUH

ALBUQUERQUE BERNALILLO COUNTY

WATER UTILITY AUTHORITY

P.O. Box 568

Albuquerque, NM 87103-0568

(505) 289-3092 pauh@abcwua.org

(505) 983-3880

CITY OF EL PASO

DOUGLAS G. CAROOM*
SUSAN M. MAXWELL
BICKERSTAFF HEATH DELGADO
ACOSTA, LLP
2711 S. MoPac Expressway
Building One, Suite 300
Austin, TX 78746

(512) 472-8021 dcaroom@bickerstaff.com smaxwell@bickerstaff.com

CITY OF LAS CRUCES

JAY F. STEIN *

JAMES C. BROCKMANN

STEIN & BROCKMANN, P.A.

P.O. Box 2067

Santé Fe, New Mexico 87504

Administrative Copy

(505) 983-3880 jcbrockmann@newmexicowaterlaw.com jfstein@newmexicowaterlaw.com administrator@newmexicowaterlaw.com

JENNIFER VEGA-BROWN ROBERT CABELLO

LAW CRUCES CITY ATTORNEY'S OFFICE P.O. Box 20000

Las Cruces, New Mexico 88004

(575) 541-2128

(575) 636-2377 (575) 636-2688 (fax)

jvega-brown@las-cruces.org rcabello@las-cruces.org

ELEPHANT BUTTE IRRIGATION DISTRICT

SAMANTHA R. BARNCASTLE*
BARNCASTLE LAW FIRM, LLC
1100 South Main, Suite 20 (88005)
P.O. Box 1556
Las Cruces, NM 88004
JANET CORRELL – Paralegal

janet@h2o-legal.com

(505) 848-1803 (direct)

mobrien@modrall.com

samantha@h2o-legal.com

EL PASO COUNTY WATER IMPROVEMENT DISTRICT NO. 1

MARIA O'BRIEN*
SARAH M. STEVENSON
MODRALL, SPERLING, ROEHL, HARRIS & SISK, PA
500 Fourth Street N.W., Suite 1000
Albuquerque, New Mexico 87103-2168
CHARLIE PADILLA – Legal Assistant

sarah.stevenson@modrall.com

RENEA HICKSLAW OFFICE OF MAX RENEA HICKS
P.O.Box 303187

rhicks@renea-hicks.com

charliep@modrall.com

(512)480-8231

Austin, TX 78703-0504

HUDSPETH COUNTY CONSERVATION AND RECLAMATION DISTRICT NO. 1

ANDREW S. "DREW" MILLER*

(512) 320-5466

KEMP SMITH LLP

dmiller@kempsmith.com

919 Congress Avenue, Suite 1305

Austin, TX 78701

STATE OF KANSAS

DEREK SCHMIDT (785) 296-2215

Attorney General of Kansas

JEFFREY A. CHANAY

toby.crouse@ag.ks.gov
bryan.clark@ag.ks.gov

Chief Deputy Attorney General

TOBY CROUSE*

Solicitor General of Kansas

BRYAN C. CLARK

Assistant Solicitor General

DWIGHT R. CARSWELL

Assistant Attorney General 120 S. W. 10th Ave., 2nd Floor

Topeka, KS 66612

NEW MEXICO PECAN GROWERS

TESSA T. DAVIDSON* ttd@tessadavidson.com

DAVIDSON LAW FIRM, LLC (505) 792-3636

4206 Corrales Road P.O. Box 2240 Corrales, NM 87048

to the pressure of

JO HARDEN – Paralegal jo@tessadavidson.com

NEW MEXICO STATE UNIVERSITY

JOHN W. UTTON* (505) 699-1445

UTTON & KERY, P.A. john@uttonkery.com

P.O. Box 2386

Santa Fe, New Mexico 87504

General Counsel gencounsel@nmsu.edu

New Mexico State University (575) 646-2446

Hadley Hall Room 132 2850 Weddell Road

Las Cruces, NM 88003

SOUTHERN RIO GRANDE DIVERSIFIED CROP FARMERS ASSOCIATION

ARNOLD J. OLSEN* (575) 624-2463 HENNIGHAUSEN OLSEN & MCCREA, L.L.P. ajolsen@h2olawyers.com

P.O. Box 1415

Roswell, NM 88202-1415

Malina Kauai, Paralegalmkauai@h2olawyers.comRochelle Bartlett, Legal Assistantrbartlett@h2olawyers.com