

IN (NOT SO) DEEP WATER: THE TEXAS–NEW MEXICO WATER WAR AND THE UNWORKABLE PROVISIONS OF THE RIO GRANDE COMPACT

Comment

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“*The Rio Grande is the only river I ever saw that needed irrigation.*”
—Will Rogers, American Actor, 1879–1935.¹

I. INTRODUCTION

The Rio Grande—a river that has never quite lived up to its name—is one of the most valuable natural resources in the West. It stretches from the Rocky Mountains in south-central Colorado, runs through the middle of New Mexico, creates the international border between Texas and Mexico, and finally spills—or more often trickles—into the Gulf of Mexico.² The Rio Grande is a vital natural resource to those who reside in the middle of the Chihuahuan Desert, where there is very little precipitation and almost no other water source apart from the river.³ Many families, small businesses, municipalities, and agricultural producers rely on the river as their primary

1. Gary W. Levings, Denis F. Healy, Steven F. Richey & Lisa F. Carter, *Water Quality in the Rio Grande Valley, Colorado, New Mexico, and Texas, 1992–95*, U.S. GEOLOGICAL SURV. CIRCULAR 1, 6 (1998), <https://pubs.usgs.gov/circ/circ1162/circ1162.pdf>.

2. *Rio Grande: In High Demand*, AM. RIVERS, <https://www.americanrivers.org/river/rio-grande-river/> (last visited Mar. 10, 2020); see also U.S. DEP’T OF THE INTERIOR BUREAU OF RECLAMATION, SECURE WATER ACT SECTION 9503(C)—RECLAMATION CLIMATE CHANGE AND WATER 2016 REPORT TO CONGRESS, in RECLAMATION: MANAGING WATER IN THE WEST 7-iii, 7-1 (2016), <https://www.usbr.gov/climate/secure/docs/2016secure/2016SECUREREport-chapter7.pdf> [hereinafter RECLAMATION CLIMATE CHANGE AND WATER].

3. *Rio Grande: In High Demand*, *supra* note 2.

source of water.⁴ A significant amount of those who rely on the water supply reside in the river's basin in southern New Mexico and West Texas.⁵

For example, Ryan Franzoy and his family run a farming operation in Hatch, New Mexico, a town commonly known as “The Chile Capitol of the World,” where they produce the state's most famous commodity: Hatch Chile.⁶ Hatch is located in southern New Mexico along the Rio Grande, about halfway between the Elephant Butte Reservoir and the Texas–New Mexico state line.⁷ Franzoy's farming operation demands thousands of acre-feet of water per year for irrigation.⁸ Franzoy also produces onions, lettuce, alfalfa, wheat, corn, cotton, and pecans.⁹ Those commodities feed and clothe consumers not only within the Hatch region but also all over the southwestern United States.¹⁰ The majority of the water Franzoy uses for irrigation purposes comes from groundwater wells drilled within a few miles of the Rio Grande.¹¹ Franzoy and many other producers within the Rio Grande Basin prefer to irrigate from surface water, but during dry years, agricultural operations rely nearly entirely on groundwater for irrigation.¹² Water shortages throughout the region have caused hardships on producers like Franzoy and his family, and it only gets worse for producers downstream.¹³

One hundred miles south of Hatch, right below the Texas–New Mexico state line, farmers and agricultural producers are facing the same or worse problems as New Mexico farmers.¹⁴ In most cases, however, producers around El Paso, Texas face shortages that are even more severe than those the producers in the Hatch Valley face.¹⁵ The groundwater shortage surrounding El Paso has been exacerbated in recent years by immense population growth and overdraft of the aquifers that underlie the region.¹⁶ If the overdraft problem gets much worse, agricultural producers whose livelihoods depend upon water availability and crop yields will be forced to abandon their operations.¹⁷ The harm would not end with producers;

4. See Lucia De Stefano, Christina Welch, Julia Urquijo & Dustin Garrick, *Groundwater Governance in the Rio Grande: Co-evolution of Local and Intergovernmental Management*, 11 WATER ALTERNATIVES 824, 835 (2018), <http://www.water-alternatives.org/index.php/alldoc/articles/vol11/v11issue3/466-a11-3-19/file>.

5. *Id.*

6. Telephone Interview with Ryan Franzoy, Agric. Producer (Jan. 13, 2019) (on file with author).

7. See VILLAGE OF HATCH, <http://www.villageofhatch.org/> (last visited Mar. 10, 2020).

8. Telephone Interview with Ryan Franzoy, *supra* note 6.

9. *Id.*

10. *Id.*

11. *Id.*

12. *Id.*

13. *Id.*

14. See Jennifer Evans, *Transboundary Groundwater in New Mexico, Texas, and Mexico: State and Local Legal Remedies to a Challenge Between Cities, States, and Nations*, 30 WM. & MARY ENVTL. L. & POL'Y REV. 471, 474–76 (2006).

15. *Id.*

16. *Id.*

17. *Id.*

consumers would also be harmed in the aftermath of an agricultural fallout in the Rio Grande Basin.¹⁸

The livelihoods of agricultural producers in the Rio Grande Basin hinge upon the availability of water from the Rio Grande.¹⁹ When river flows decrease, so do crop yields and revenue.²⁰ Producers take major hits, and at low points or drought years, they may even face two to three years without breaking even in their operations.²¹ This in turn raises prices for consumers who buy fresh produce, grains, wheat products, and textile materials—all of which derive from production within the Rio Grande Basin.²² Producers are not the only people affected by water shortages in the Rio Grande; municipalities and industrial operations in the middle of the vast desert also rely on the lone surface water resource and its interconnected groundwater resources.²³

What is worse, some producers and consumers may have less access to water than their upstream or downstream counterparts due to factors like the annual water obligations that New Mexico must pay to Texas under the Rio Grande Compact (the Compact)²⁴ and the groundwater pumping that depletes the river flows of the Rio Grande.²⁵ The extensive water payments and river flow shortages are a direct result of the frozen-in-time provisions of the Rio Grande Compact.²⁶

The Compact is an outdated water arrangement between Colorado, New Mexico, and Texas that requires water payments from the upstream states to the respective downstream states.²⁷ The quantities of water payments are based upon water conditions from the late 1920s.²⁸ While the purpose of the Compact is to prevent controversy between the states,²⁹ the frozen provisions have done the opposite, and they must be reconstructed to address changing conditions that affect water availability along the river. The provisions of the Compact are impossible to follow as they currently stand.³⁰ The Compact must be restructured to reflect changing conditions that affect water availability along the river, it must serve the interest of the river as a natural

18. Telephone Interview with Ryan Franzoy, *supra* note 6.

19. *Id.*

20. *Id.*

21. *Id.*

22. *Id.*

23. See De Stefano et al., *supra* note 4, at 835.

24. Rio Grande Compact, Pub. L. No. 76-96, 53 Stat. 785 (1939).

25. De Stefano et al., *supra* note 4, at 835.

26. See 53 Stat. 785.

27. *Id.*

28. See *id.*; Raymond A. Hill, *Development of the Rio Grande Compact of 1938*, 14 NAT. RESOURCES J. 163, 167 (1974).

29. See 53 Stat. 785.

30. See *id.*; Hill, *supra* note 28, at 167 (explaining that the provisions of the Compact originated in 1929 and were incorporated to maintain the status quo of the conditions).

resource, and provide for apportionment between the states on the basis of fairness and sustainability of the river.

This Comment will address the effects of the frozen-in-time Compact, the Compact's problematic provisions, the necessity of restructuring the Compact, and the factors that must be considered in the restructured Compact. Part II provides a background explanation of the Rio Grande Basin and the governance of the waters of the Rio Grande.³¹ The section provides context for problems like the water shortages within the region, the dispute between Texas and New Mexico over the waters of the river, the differing groundwater laws between the two states, and the Supreme Court's jurisprudence over interstate water disputes.³²

Part III focuses on the problematic provisions of the Compact and the underlying dilemma the Compact presents: It is frozen in time under outdated provisions.³³ The section will analyze how the Supreme Court is likely to rule on the Texas–New Mexico water dispute and whether it will follow its shifting trend in interstate-compact jurisprudence.³⁴ The section also proposes that the Compact should be amended and restructured to establish a conceptual framework for the updated Compact.³⁵ The section argues that the Compact should include provisions that will not rely on outdated conditions of the river but will consider a number of factors that affect water availability in the river basin.³⁶ Part III further suggests solutions to the problems of the frozen-in-time Compact; it suggests that the focus of the Compact shift away from states' opposing interests and move toward serving the best interest of the water resource itself.³⁷ To understand the current legal landscape in the Rio Grande Basin, the river's lengthy legal history must first be considered.

II. AN HISTORICAL LOOK AT THE RIO GRANDE AND THE CONFLICTS SURROUNDING IT

To understand the controversy and disputes that surround the Rio Grande and its governing instruments, it is essential to first understand the

31. See *infra* Part II.A (explaining the ecological makeup of the Rio Grande Basin and the provisions of the Rio Grande Compact).

32. See *infra* Part II.B (providing background information regarding the problems states face under the Rio Grande Compact).

33. See *infra* Part III.B (describing the problems posed by the outdated provisions in the Rio Grande Compact).

34. See *infra* Part III.A (analyzing the possible outcomes of the Supreme Court's decision in *Texas v. New Mexico*).

35. See *infra* Part III.C (proposing factors that should contribute to an updated framework for the Compact).

36. See *infra* Part III.C (specifying factors that should be incorporated into an updated Rio Grande Compact).

37. See *infra* Part III.C (considering the interests of the Rio Grande itself).

magnitude of the problems the Rio Grande Basin (the Basin) faces.³⁸ It is important to address the layout of the Basin, the climatic threats to the region, and the governance and allocation of the region's sole surface water resource. It is also important to understand the structure of the use and regulation of groundwater resources in the Basin and the legal disputes between states over the use of both the river water and groundwater.

A. The Rio Grande Basin

The Chihuahuan Desert stretches far and wide across the southwestern region of the United States and the north-central region of Mexico.³⁹ It encompasses portions of southeastern Arizona, southern New Mexico, and West Texas.⁴⁰ The precipitation is scarce; rattlesnakes and lizards, mesquite and cacti, and antelope and bobcats make up the majority of the wildlife; and the dry clay soil cracks beneath one's feet with every step.⁴¹ But in the middle of the vast desert is an oasis: The Rio Grande.⁴² The Rio Grande is an interstate and international river that originates in the San Juan Range of the Rocky Mountains in Colorado and flows south to the Gulf of Mexico.⁴³ The river splits the State of New Mexico in half as it makes its way south to serve as the international border between Texas and Mexico.⁴⁴ Along the Rio Grande are farmers, pecan orchardists, and other agricultural producers like Ryan Franzoy whose livelihoods rely solely on the water from the river.⁴⁵

Consumers of water along the Rio Grande, particularly within the region governed under the Rio Grande Project,⁴⁶ rely heavily on the Rio Grande and its interconnected groundwater resources for their primary or, in many cases, only source of water.⁴⁷ Over the last half-century or more, water levels within the Rio Grande have steadily and substantially declined.⁴⁸ While water availability has decreased, the demand for water in the Rio Grande Basin

38. For the purposes of this Comment, the "Rio Grande Basin" refers to the region along the Rio Grande beginning at Elephant Butte Reservoir, New Mexico and ending at Fort Quitman, Texas. This is the region that is governed by the Rio Grande Project and it is the main regional focus of this Comment. See Rio Grande Compact, Pub. L. No. 76-96, art. IV, 53 Stat. 785, 788 (1939).

39. *Chihuahuan Desert Wildlife*, SUMMITPOST, <https://www.summitpost.org/chihuahuan-desert-wildlife/347545> (last visited Mar. 10, 2020).

40. *Id.*

41. *Id.*

42. *Rio Grande: In High Demand*, *supra* note 2.

43. *Id.*

44. *Id.*

45. Telephone Interview with Ryan Franzoy, *supra* note 6; see De Stefano et al., *supra* note 4, at 835; *Rio Grande: In High Demand*, *supra* note 2.

46. See *infra* Part II.B.1 (explaining the history and jurisdiction of the Rio Grande Project).

47. See RECLAMATION CLIMATE CHANGE AND WATER, *supra* note 2, at 7-12.

48. See *id.*

continues to increase.⁴⁹ The amount of available water from the Rio Grande varies significantly from one year to the next, and “[t]he magnitude and frequency of water supply shortages” in the river are severe.⁵⁰ In fact, many times in recent years, river flows of the Rio Grande have not reached the mouth of the river at the Gulf of Mexico.⁵¹

Consumers along the Rio Grande in southern Colorado and northern New Mexico primarily rely on surface water from the river.⁵² By the time the river makes its way to the Texas–New Mexico border, however, less than half of consumers rely on surface water because the river’s flows have become increasingly insufficient to meet the demands of the Basin.⁵³ At the current rate of consumption, the river and its corresponding groundwater levels fail to fully recharge each year, and consequently, yearly river flows and water tables suffer.⁵⁴ With such a high demand for the Rio Grande’s water, the United States government and the three states have sought to manage the waters through allocation and apportionment agreements.⁵⁵

B. Allocating the Waters of the Rio Grande

The historically high demand and competing interests for the Rio Grande waters led to negotiations and arrangements regarding water appropriation during the early development of western states.⁵⁶ The development and use of water in the West began in the early twentieth century, with part of that development involving the Rio Grande Project.⁵⁷ The United States and Mexico entered into a treaty to apportion the waters of the international boundary in 1906, and thirty years later, the states abutting the river followed suit in an interstate water compact known as the Rio Grande Compact.⁵⁸

1. The Rio Grande Project

At the outset of a national shift toward regulated water development and management, Congress passed the Reclamation Act of 1902 and established

49. Logan Hawkes, *Groundwater Pumping Causing Levels to Rapidly Drop*, FARM PROGRESS (Dec. 29, 2014), <https://www.farmprogress.com/water-shortage/groundwater-pumping-causing-levels-rapidly-drop>.

50. RECLAMATION CLIMATE CHANGE AND WATER, *supra* note 2, at 7-1.

51. *Id.*

52. *Id.*

53. *Id.*

54. See De Stefano et al., *supra* note 4, at 835; Hawkes, *supra* note 49.

55. See Hill, *supra* note 28, at 167.

56. See *A Very Brief History*, BUREAU RECLAMATION, <https://www.usbr.gov/history/borhist.html> (last visited Mar. 10, 2020).

57. See *id.*

58. See Robert Autobee, *Rio Grande Project*, BUREAU RECLAMATION 1, 7 (1994), <https://www.usbr.gov/projects/pdf.php?id=179>; Hill, *supra* note 28, at 167.

the United States Reclamation Service (USRS), which later became the Bureau of Reclamation in 1907.⁵⁹ The USRS embarked upon the construction of the Rio Grande Project (the Project) nearly immediately after the Service's creation.⁶⁰

The Project established the construction and regulation of a federal dam and reservoir that is known today as Elephant Butte Reservoir (Elephant Butte).⁶¹ Elephant Butte is located near Truth or Consequences, New Mexico, about one hundred miles north of the Texas–New Mexico state line.⁶² The reservoir was built with a storage capacity of 2 million acre-feet of water.⁶³ An acre-foot of water is the amount of water it takes to cover an acre of land in one foot of water, which roughly translates to 326,000 gallons.⁶⁴ The purpose of the Project was to address and resolve disputes over the water of the Rio Grande between New Mexico, Texas, and Mexico.⁶⁵ The Project focused on the region within the Rio Grande Basin, stretching from Elephant Butte, New Mexico to Fort Quitman, Texas.⁶⁶

59. *A Very Brief History*, *supra* note 56.

60. Autabee, *supra* note 58, at 6.

61. *See id.* at 7.

62. *Id.* at 3.

63. *Id.* at 6.

64. *Acre-Foot*, BLACK'S LAW DICTIONARY (10th ed. 2009). An acre-foot is defined as “[a] volume measurement, as of coal, water, or other material, equal to the amount that will cover one acre of land to a depth of one foot (approximately 325,850 gallons).” *Id.*

65. Autabee, *supra* note 58, at 5–7.

66. *See id.* at 3, 7 (explaining the location and rights of parties under the treaty establishing the Project).

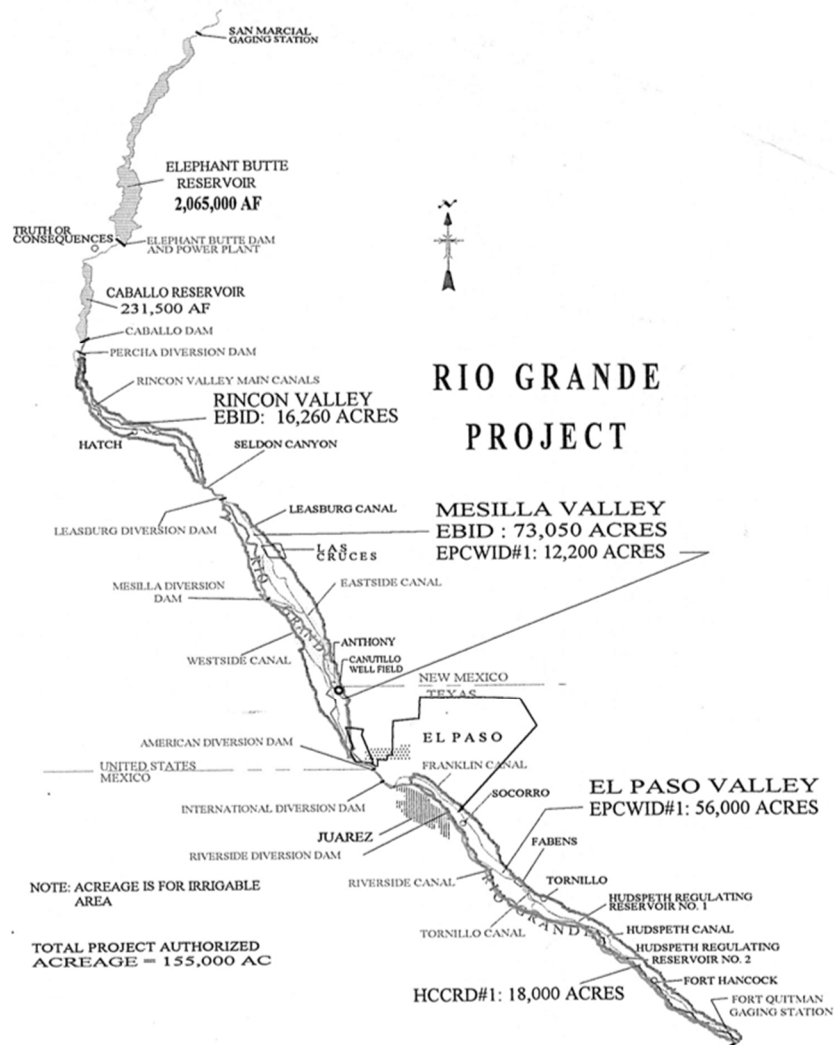


Figure 1. The Rio Grande Project, and the regional focus of this Comment, begins at Elephant Butte Reservoir, New Mexico and ends at Fort Quitman, Texas. Elephant Butte Reservoir is located approximately 100 miles north of the New Mexico–Texas state line. Fort Quitman, Texas is located approximately ninety miles south of the state line. 67

2. The Mexico–United States Treaty

In the interest of resolving the international disputes over the Rio Grande, the United States and Mexico negotiated and signed a convention treaty in 1906 regarding the equitable distribution of Rio Grande water

67. “Making the Desert Bloom”: *The Rio Grande Project*, NAT’L PARK SERV., <https://www.nps.gov/articles/-making-the-desert-bloom-the-rio-grande-project-teaching-with-historic-places> (last visited Apr. 25, 2020).

between the two countries.⁶⁸ Under the terms of the treaty, the United States pledged a delivery of 60,000 acre-feet of water to Mexico annually, which would be measured at and delivered from the Elephant Butte Reservoir.⁶⁹ In return, Mexico waived all claims to waters from the Rio Grande above Fort Quitman, Texas, which is located about ninety miles downstream from the Texas–New Mexico state line.⁷⁰

Unfortunately, disputes over the Rio Grande did not end with the treaty. The states that shared the Rio Grande—primarily New Mexico and Texas—remained at odds for over three decades following the signing of the treaty.⁷¹ In 1912, New Mexico became an official state of the United States, and in 1938, the Rio Grande Compact was created.⁷²

3. *The Rio Grande Compact*

While the water dispute between the United States and Mexico seemed settled by the 1906 treaty, the individual states still faced conflicts and discord.⁷³ In 1929, Colorado, New Mexico, and Texas created a preliminary interstate water compact for the purpose of the equitable apportionment of the waters of the Rio Grande.⁷⁴ Interstate water compacts are authorized by the Compact Clause of the United States Constitution and must be approved and ratified by Congress.⁷⁵ Once ratified, interstate compacts effectively become federal law and are analogous to a congressional act or statute.⁷⁶

The 1929 compact would later serve as a guideline for the commissioners who negotiated the 1938 Rio Grande Compact.⁷⁷ In fact, a substantial amount of the provisions in the 1929 compact were incorporated into the 1938 Compact.⁷⁸ The 1929 compact called for the appointment of one commissioner from each state, which led to the creation of the Rio Grande Compact Commission.⁷⁹ In 1938, the three states entered into what is known today as the Rio Grande Compact, and Congress approved the

68. Autabee, *supra* note 58, at 7.

69. Convention for the Equitable Distribution of the Waters of the Rio Grande, U.S.-Mex., art. IV, May 21, 1906, 34 Stat. 2953 [hereinafter Rio Grande Treaty]; *see* Autabee, *supra* note 58, at 7.

70. Rio Grande Treaty, *supra* note 69, at 2953; *see also* Autabee, *supra* note 58, at 7 (discussing the terms of the Treaty between the United States and Mexico which committed 60,000 acre-feet to Mexico annually).

71. *See, e.g.*, Texas v. New Mexico, 138 S. Ct. 954, 957 (2018) (regarding the most recent dispute between the states).

72. *See id.*

73. *See* Hill, *supra* note 28, at 166.

74. *See id.* at 167.

75. *See* U.S. CONST. art. I, § 10, cl. 3.

76. Texas, 138 S. Ct. at 958.

77. Hill, *supra* note 28, at 167.

78. *Id.*

79. *Id.*

Compact in 1939.⁸⁰ The Compact governs the apportionment of all waters of the Rio Grande above Fort Quitman, Texas.⁸¹ The region between Elephant Butte, New Mexico and Fort Quitman, Texas—the region the Rio Grande Compact covers—is the primary focus of this Comment.

C. *The Substantial Differences in the Relevant Groundwater Law*

The groundwater law schemes in New Mexico and Texas are in stark contrast from one another.⁸² Consumers and groundwater users within the Rio Grande Basin—in both New Mexico and Texas—obtain the majority of their groundwater from three main aquifers:⁸³ the Hueco Bolson, Mesilla Bolson, and Rio Grande Alluvium.⁸⁴ Agricultural production on both sides of the state line rely heavily on the groundwater resources for irrigation, especially during years of low river flows.⁸⁵ Municipalities and rural communities in the region are almost entirely reliant upon groundwater for drinking water supplies.⁸⁶ The aquifers in the region are hydrologically connected directly to the Rio Grande, and the depletion of the aquifers, in turn, depletes surface water levels of the Rio Grande, which further adds to the severe shortages the river suffers.⁸⁷ The quantity of water each consumer may extract from groundwater resources depends directly upon the state in which the groundwater well is located.⁸⁸ The laws that govern groundwater consumption in the Basin vary substantially between New Mexico and Texas.⁸⁹

I. *New Mexico Water Law*

New Mexico's water laws—surface and groundwater—are all generally governed by the doctrine of prior appropriation.⁹⁰ The prior appropriation

80. Rio Grande Compact, Pub. L. No. 76-96, 53 Stat. 785 (1939); *Interstate Stream Commission*, N.M. OFF. ST. ENGINEER, http://www.ose.state.nm.us/Compacts/RioGrande/isc_RioGrande.php (last visited Mar. 10, 2020).

81. *Interstate Stream Commission*, *supra* note 80.

82. See M.D. Smolen, Aaron Mittelstet & Bekki Harjo, *Whose Water Is It Anyway? Comparing the Water Rights Frameworks of Arkansas, Oklahoma, Texas, New Mexico, Georgia, Alabama, and Florida*, OKLA. COOPERATIVE EXTENSION SERV. (Apr. 2017), <http://factsheets.okstate.edu/documents/e-1030-whose-water-is-it-anyway-comparing-the-water-rights-frameworks-of-arkansas-oklahoma-texas-new-mexico-georgia-alabama-and-florida/>.

83. An aquifer is defined as “a body of permeable rock that can contain or transmit groundwater.” NEW OXFORD AM. DICTIONARY (2d ed. 2005).

84. De Stefano et al., *supra* note 4, at 835.

85. See RECLAMATION CLIMATE CHANGE AND WATER, *supra* note 2, at 7-1.

86. De Stefano et al., *supra* note 4, at 835.

87. *Id.* at 825; RECLAMATION CLIMATE CHANGE AND WATER, *supra* note 2, at 7-1.

88. See Smolen et al., *supra* note 82.

89. See *id.*

90. See Amy Hardberger, Comment, *What Lies Beneath: Determining the Necessity of International Groundwater Policy Along the United States–Mexico Border and a Roadmap to an Agreement*, 35 TEX.

doctrine is complicated, but simply put, the essence of the doctrine is “first come, first served.”⁹¹ While the water is considered property of the state, all persons, municipalities, and other consumers may use the water so long as it is for a beneficial use.⁹² The state issues permits and adjudicates water rights to users based on their priority in time and the reasonableness of their water use.⁹³ The permit and adjudicative process for water rights throughout New Mexico are codified in state statutes and regulated by the Office of the State Engineer (OSE).⁹⁴

All groundwater throughout New Mexico is publicly owned and subject to appropriation by the OSE through permits.⁹⁵ Each permit the State Engineer grants is subject to (or “junior” to) all water rights that were owned prior to the most recently granted permit.⁹⁶ This doctrine depicts the concept of priority rights, which has existed in the New Mexico territory even before it became a state in 1912.⁹⁷ The State Engineer will only grant a permit if he or she deems the use of the water as a “beneficial use.”⁹⁸ Once a water right is permitted, the water use is subject to adjudication and is limited to a prescribed quantity of water per year.⁹⁹ Typically, domestic wells for single-family households are allotted one acre-foot per year.¹⁰⁰ Irrigation groundwater wells, like the majority of the wells in the Rio Grande Basin, are allotted a specified quantity determined by the State Engineer.¹⁰¹ New Mexico’s groundwater scheme, which has been regulated since the 1930s,¹⁰² is in nearly direct conflict with Texas’s recently established and loosely governed groundwater scheme.¹⁰³

TECH L. REV. 1211, 1241–43 (2004); see Utton Transboundary Res. Ctr., *Basic Water Law Concepts, in WATER MATTERS!* 1-1, 1-1, 1-3 (2015), <http://uttoncenter.unm.edu/resources/research-resources/water-matters-2015---full-pdf.pdf>.

91. Tiffany Dowell Lashmet, *Texas Water: Basics of Surface Water Law*, TEX. AGRIC. L. BLOG (Sept. 30, 2013), <https://agrilife.org/texasaglaw/2013/09/30/texas-water-basics-of-surface-water-law/>.

92. See Hardberger, *supra* note 90, at 1241–43; Utton Transboundary Res. Ctr., *supra* note 90, at 1-3 to 1-5.

93. See Hardberger, *supra* note 90, at 1241–43; Utton Transboundary Res. Ctr., *supra* note 90, at 1-3 to 1-5.

94. See Hardberger, *supra* note 90, at 1241–43; Utton Transboundary Res. Ctr., *supra* note 90, at 1-3 to 1-5.

95. Smolen et al., *supra* note 82.

96. *Id.* The right to use water in New Mexico is governed by the chronological order in which the rights were obtained. *Id.* “Junior” water rights are rights that were obtained later than “senior” water rights within New Mexico and are subject to reduced water during shortages because senior rights have priority. *Id.*

97. Utton Transboundary Res. Ctr., *supra* note 90, at 1-3 to 1-4.

98. *Id.* at 1-5.

99. *Id.* at 1-3 to 1-5.

100. Smolen et al., *supra* note 82.

101. *Water Rights, Statutes, Rules, Regulations & Guidelines*, N.M. OFF. ST. ENGINEER, <http://www.ose.state.nm.us/WR/WRrules.php> (last visited Mar. 4, 2020).

102. Utton Transboundary Res. Ctr., *supra* note 90, at 1-3 to 1-5.

103. Smolen et al., *supra* note 82.

2. Texas Water Law

Texas surface water, like the water in New Mexico, is owned by the state and can only be used by individuals through permits under a prior appropriation system.¹⁰⁴ For many years, Texas followed the riparian doctrine, an English common law doctrine, for governance of surface water.¹⁰⁵ The riparian doctrine tied surface water rights to land ownership and allowed landowners to retain the right to use surface water so long as the landowner maintained ownership of the adjacent land.¹⁰⁶

With the scarcity of surface water—especially in West Texas—the state shifted to governing its surface water through prior appropriation.¹⁰⁷ The Water Rights Adjudication Act of 1967 (the Act) codified the merger of the riparian and prior appropriation doctrines.¹⁰⁸ The Act required any person claiming a riparian right to surface water to file a claim for that right with the state which effectively created a uniform permit system for surface water in Texas.¹⁰⁹

Texas groundwater rights vary substantially from its surface water rights.¹¹⁰ In contrast to surface water, the state does not own groundwater.¹¹¹ Through common law, Texas applies the “rule of capture” to its groundwater.¹¹² The rule of capture follows the concept that a landowner has the right to take all of the water that he can capture from below his land.¹¹³ The Texas Supreme Court analogized groundwater to oil and gas, and it applied its oil and gas precedent to groundwater in *Edwards Aquifer Authority v. Day*.¹¹⁴ In establishing a rule of ownership in place for groundwater, the Court held that a landowner’s right to the groundwater beneath his land is “an exclusive and private property right . . . inhering in virtue of his proprietorship of the land, and of which he may not be deprived without a taking of private property.”¹¹⁵

Based on Texas groundwater case law, any landowner can effectively extract as much groundwater as physically possible from a well drilled on

104. *Texas Water Law*, TEX. WATER, <https://texaswater.tamu.edu/water-law/>; see Hardberger, *supra* note 90, at 1240–42.

105. *Texas Water Law*, *supra* note 104; see Hardberger, *supra* note 90, at 1240–42.

106. *Texas Water Law*, *supra* note 104; see Hardberger, *supra* note 90, at 1240–42.

107. *Texas Water Law*, *supra* note 104; see Hardberger, *supra* note 90, at 1240–42.

108. *Texas Water Law*, *supra* note 104; see Hardberger, *supra* note 90, at 1240–42.

109. *Texas Water Law*, *supra* note 104; see Hardberger, *supra* note 90, at 1240–42.

110. *Texas Water Law*, *supra* note 104; see Hardberger, *supra* note 90, at 1240–42.

111. Hardberger, *supra* note 90, at 1240–42.

112. Smolen et al., *supra* note 82.

113. *Texas Water Law*, *supra* note 104.

114. *Edwards Aquifer Auth. v. Day*, 369 S.W.3d 814 (Tex. 2012).

115. *Id.* at 829 (alteration in original) (quoting *Tex. Co. v. Daugherty*, 176 S.W. 717, 722 (Tex. 1915)). For a discussion of the implications of this holding, see Matthew Ley, *What Are You Going to Do About It?: The Ramifications of the Edwards Aquifer Authority v. Day Decision on Interstate Groundwater Disputes*, 65 BAYLOR L. REV. 661 (2013).

their land regardless of the effects it has on neighboring lands and water users.¹¹⁶ The rule of capture for groundwater is minimally limited by the prohibition of waste, but the Texas Supreme Court has hinted that it may consider modifying the rule of capture as it applies to groundwater if the Texas Legislature does not take adequate measures to address groundwater overdrafting.¹¹⁷ In light of the conflicting groundwater laws between New Mexico and Texas, it is of little surprise that the two states have been in several disputes over interstate water resources throughout the years.

D. The Heated Disputes and Litigation Between Texas and New Mexico

The conflicting groundwater laws in New Mexico and Texas have led to conflict despite the agreement the states entered in an attempt to alleviate tensions.¹¹⁸ Not long after signing the Rio Grande Compact, the parties could not adhere to the provisions of the Compact.¹¹⁹ Since the signing and ratification of the Compact in 1939, New Mexico and Texas have been at odds over whether the obligations under the Compact have been fulfilled or whether New Mexico is thousands of acre-feet in debt to Texas.¹²⁰ In fact, the states have been bickering over their share of the Rio Grande waters for the better half of a century.¹²¹

The Supreme Court has original jurisdiction over disputes involving interstate water compacts,¹²² and it has heard multiple water-dispute cases between Texas and New Mexico since 1935.¹²³ The most recent dispute involves Texas's claims that New Mexico is in violation of the Compact because groundwater wells downstream from Elephant Butte have taken water from the river that is originally released from the reservoir as part of New Mexico's annual obligation to Texas.¹²⁴ The United States brings similar claims against New Mexico as they relate to the Rio Grande and the United States' obligations to Mexico under the 1906 treaty.¹²⁵ Colorado is named as a party in the suit but only because it is a party-state to the Compact; it is not involved in the controversies currently at issue.¹²⁶

The Supreme Court has yet to hear the case on its merits. It granted certiorari for the case in its 2018 term, but it only heard arguments regarding

116. *Texas Water Law*, *supra* note 104.

117. *Id.*; *see also* Sipriano v. Great Spring Waters of Am., Inc., 1 S.W.3d 75 (Tex. 1999) (holding that the legislature should handle the issue of preserving natural resources such as water).

118. *See* Texas v. New Mexico, 138 S. Ct. 954, 957 (2018).

119. *See id.* at 954.

120. *Id.*

121. *Id.* at 957.

122. *See* U.S. CONST. art. III, § 2, cl. 2; 28 U.S.C. § 1251(a) (2018).

123. Hill, *supra* note 28, at 174; *see, e.g.*, Texas v. New Mexico, 482 U.S. 124 (1987) (involving the states' earlier conflict over the Pecos River); Texas v. New Mexico, 462 U.S. 554 (1983) (same).

124. *See* Texas, 138 S. Ct. at 958.

125. *See id.* at 954; Rio Grande Treaty, *supra* note 69.

126. Texas, 138 S. Ct. at 958.

the United States' intervention into the case.¹²⁷ The Court ruled that the United States may intervene into the dispute between the states because the United States has a specific interest in the case based on its water delivery obligations to Mexico and its involvement in the Rio Grande Project.¹²⁸ In making the procedural ruling to allow the United States to intervene and remanding the case back to the investigation of a newly appointed Special Master,¹²⁹ the Supreme Court effectively postponed its ruling on the merits of this dispute and left many questions unanswered.¹³⁰

I. Texas's Claims Against New Mexico

In its complaint, Texas claims that it has taken measures to ensure its compliance with the Rio Grande Compact, but that New Mexico is in violation through post-compact developments in the state, south of Elephant Butte.¹³¹ Texas claims that New Mexico has authorized consumers along the river to divert and extract Rio Grande Project water that should be allocated to Texas.¹³² It further claims that it has a right to the water that New Mexico is diverting, including the groundwater in the Basin that is hydrologically connected to the Rio Grande.¹³³ New Mexico's actions have gone against what Texas asserts to be "the purpose and intent" of the Rio Grande Compact and the Rio Grande Project.¹³⁴

Texas further claims that it has attempted to address its concerns with New Mexico directly, but New Mexico has refused to remediate the claimed harm done to Texas and has instead sought to make permanent its actions of intercepting waters south of Elephant Butte.¹³⁵ According to Texas, New Mexico's actions are in violation of the Rio Grande Compact because Texas is entitled to the intercepted water under the Compact and the Rio Grande Project.¹³⁶

127. *See id.* at 957.

128. *Id.* at 960.

129. *Id.* Special Masters are appointed by the Court to carry out functions that are absent in original jurisdiction cases because of the lack of an appellate record. *See* Anne-Marie C. Carstens, *Lurking in the Shadows of Judicial Process: Special Masters in the Supreme Court's Original Jurisdiction Cases*, 86 MINN. L. REV. 625 (2002). The Court may assign Special Masters to many duties such as making findings of fact and conclusions of law to prepare a report to the Court on the merits of a case. *See id.* at 653–59. For a discussion of the problems that arise with the appointment of Special Masters in interstate water disputes, see L. Elizabeth Sarine, Note, *The Supreme Court's Problematic Deference to Special Masters in Interstate Water Disputes*, 39 ECOLOGY L.Q. 535 (2012).

130. *See Texas v. New Mexico and Colorado*, SCOTUSBLOG, <http://www.scotusblog.com/case-files/cases/texas-v-new-mexico-and-colorado/> (last visited Mar. 4, 2020).

131. Brief in Support of Motion for Leave to File Complaint at 15–16, *Texas v. New Mexico*, 138 S. Ct. 954 (2018) (No. 141, Original) [hereinafter Brief for Texas].

132. *Id.* at 16.

133. *Id.*

134. *Id.*

135. *Id.*

136. *Id.* at 17.

2. New Mexico's Response to Texas's Claims

New Mexico, on the other hand, asserts that the Rio Grande Compact does not expressly require New Mexico to deliver any specified quantity of water to Texas at the Texas–New Mexico state line; it only requires that New Mexico deliver water to Elephant Butte, which New Mexico asserts it has done.¹³⁷ New Mexico makes a textualist argument to the Court: it reads the plain language of the Compact in its answer and opposes Texas's “purpose and intent” approach.¹³⁸ New Mexico argues that under the provisions of the Compact, it has no obligation to protect against or prevent any water depletion below Elephant Butte and is therefore not in violation of the Compact.¹³⁹ While this dispute is the most recent before the Court, it is certainly not the first interstate water dispute that the Supreme Court has considered.

E. The Supreme Court's Jurisprudence in Interstate Water Disputes

The United States Supreme Court has original jurisdiction over disputes between states.¹⁴⁰ Accordingly, the Court has heard several interstate water disputes between western states.¹⁴¹ Throughout its jurisprudence over interstate water disputes, the Court has created a volatile pattern of holdings.¹⁴² In some cases, the Court has recognized and asserted its power to equitably apportion interstate streams among the states; in other cases, the Court has considered interstate water compacts as contracts and has held that the compacts must be followed by the compact language in accordance with principles of contract law.¹⁴³

137. New Mexico's Brief in Opposition to Texas's Motion for Leave to File Complaint at 1, *Texas v. New Mexico*, 138 S. Ct. 954 (2018) (No. 141, Original) [hereinafter Brief for New Mexico].

138. *Id.* at 2–3.

139. *Id.* at 2–5.

140. *Texas*, 138 S. Ct. at 958 (citing U.S. CONST. art. III, § 2).

141. *See, e.g.*, *Kansas v. Nebraska*, 135 S. Ct. 1042 (2015); *Tarrant Reg'l Water Dist. v. Herrmann*, 133 S. Ct. 2120 (2013); *Oklahoma v. New Mexico*, 501 U.S. 221 (1991); *Texas v. New Mexico*, 482 U.S. 124 (1987); *Nebraska v. Wyoming*, 325 U.S. 589 (1945); *Hinderlider v. La Plata River & Cherry Creek Ditch Co.*, 304 U.S. 92 (1938); *New Jersey v. New York*, 283 U.S. 336 (1931); *Wyoming v. Colorado*, 259 U.S. 419 (1922); *Kansas v. Colorado*, 206 U.S. 46 (1907).

142. *See generally* Burke W. Griggs, *Interstate Water Litigation in the West: A Fifty-Year Retrospective*, 20 U. DENV. WATER L. REV. 153 (2017); Shannon Behm, Note, *Kansas v. Nebraska: The United States Supreme Court Demonstrates That You Can Lead the Court to Water (Precedent), but You Can't Make the Court Follow It*, 49 CREIGHTON L. REV. 391 (2016).

143. *See generally* Griggs, *supra* note 142; Behm, *supra* note 142.

I. The Court's Power of Equitable Apportionment

The Supreme Court considered its first interstate water dispute in 1907 between Kansas and Colorado over the Arkansas River.¹⁴⁴ The states naturally had opposing interests in the river and took the dispute to the Supreme Court under its original jurisdiction.¹⁴⁵ The Court rejected both states' claims for dominion over the water resource, and instead held that the states should allocate the waters of the river according to the "equitable apportionment of benefits between the two states resulting from the flow of the river," which effectively encouraged the states to enter into an interstate water agreement.¹⁴⁶ Although the Court left the apportionment of the water up to the states in that case, it took the opportunity to declare its power to require the equitable apportionment of interstate waterways.¹⁴⁷

In later years, the Court heard cases regarding interstate water compacts and exercised its power of equitable apportionment.¹⁴⁸ In *Wyoming v. Colorado*,¹⁴⁹ in 1922, the Court apportioned the waters of the Laramie River between the two states in their dispute over the waterway.¹⁵⁰ In 1931, the Court used its power to equitably apportion the waters of the Delaware River between New Jersey and New York.¹⁵¹ Finally in 1945, the Court equitably apportioned the North Platte River between Nebraska and Wyoming and considered equitable factors that affected the use of the river's water.¹⁵²

Through its equitable apportionment for thirty years, the Court effectively portrayed to states that they should seek to equitably apportion their interstate water resources on their own terms through compacts or agreements.¹⁵³ As more western states began entering into interstate water compacts, more litigation began to arise before the Supreme Court.¹⁵⁴ Disputes over the provisions of those compacts arose between states nearly immediately after the compacts were ratified.¹⁵⁵ The Court soon shifted its sails and began considering the compacts under a different light.

144. *Kansas*, 206 U.S. 46 (1907).

145. *Id.*

146. *Id.* at 118.

147. *Id.* at 117.

148. *See Griggs*, *supra* note 142, at 171.

149. *Wyoming v. Colorado*, 259 U.S. 419 (1922).

150. *Id.*

151. *New Jersey v. New York*, 283 U.S. 336 (1931), *decree amended by New Jersey v. New York*, 347 U.S. 995 (1954) (Delaware River Decree).

152. *Nebraska v. Wyoming*, 325 U.S. 589 (1945).

153. *See Griggs*, *supra* note 142, at 171.

154. *Id.*

155. *Id.*

2. The Court Addresses Interstate Compacts as Contracts

After the Nebraska–Wyoming interstate water dispute, New Mexico and Texas made their debut before the Supreme Court in a dispute arising from the Pecos River Compact of 1949.¹⁵⁶ Due to the irregular flow of the Pecos River, New Mexico was not fulfilling its obligation to Texas, and the states could not agree on how much water Texas should receive.¹⁵⁷ The compact between the states required that water payments from New Mexico to Texas be based on the condition of the river in 1947.¹⁵⁸ The Supreme Court heard and remanded the case to a Special Master in 1974, and the case made its way back to the Supreme Court by 1984.¹⁵⁹ Finally, forty years after its last holding on an interstate water compact, the Supreme Court held that “a compact when approved by Congress becomes a law of the United States, but ‘[a] Compact is, after all, a contract.’ . . . that must be construed and applied in accordance with its terms.”¹⁶⁰ This was a significant shift from the equitable apportionment trend that the Court followed in decades prior.¹⁶¹

The Supreme Court continued to follow this new trend of interpreting compacts under contract law principles, holding the parties to the exact terms of the interstate water compacts, when it heard the 1991 dispute over the Canadian River Compact.¹⁶² While the purpose of the compact was “to equitably apportion the waters of the Canadian River,”¹⁶³ the Court held that the compact must be interpreted on its face.¹⁶⁴ The Court reasoned that under the ambiguous terms of the compact, the apparent intent of the drafters must be considered to determine the proper interpretation.¹⁶⁵

The Court continued this trend twenty years later in *Tarrant Regional Water District v. Hermann* in 2013.¹⁶⁶ When considering the dispute over the Red River Compact, which suggested a purpose of equitably apportioning the waters of the Red River among the party-states, the Court continued to follow principles of contract law.¹⁶⁷ It decided that the express terms of the Red River Compact reflected an intent of the states to allocate the water from the river to each state based only on the water within each respective state.¹⁶⁸

156. Pecos River Compact, Pub. L. No. 91-184, 63 Stat. 159 (1949); *Texas v. New Mexico*, 482 U.S. 124 (1987).

157. *Texas*, 482 U.S. at 126.

158. *Id.*

159. *Id.* at 126–27.

160. *Id.* at 128 (first alteration in original) (citations omitted) (quoting *Petty v. Tenn.-Mo. Bridge Comm'n*, 359 U.S. 275, 285 (1959)) (citing *W. Va. ex rel. Dyer v. Sims*, 341 U.S. 22, 28 (1951)).

161. See Griggs, *supra* note 142, at 171.

162. *Oklahoma v. New Mexico*, 501 U.S. 221, 223 (1991).

163. *Id.* at 224–25.

164. *Id.* at 229–30.

165. *Id.* at 237.

166. *Tarrant Reg'l Water Dist. v. Hermann*, 569 U.S. 614 (2013).

167. *Id.* at 628.

168. *Id.* at 627–29.

After thirty years, the reliance on principles of contract law seemed to be the Supreme Court's new position, until it heard the 2015 dispute between Kansas and Nebraska.¹⁶⁹

3. *The Court Borrows Principles from Both Equity and Contract Law*

In 2015, just two years after the Red River Compact dispute in 2013, the Supreme Court made yet another shift in its interstate water compact jurisprudence.¹⁷⁰ Colorado, Kansas, and Nebraska have faced interstate water disputes since the early 1930s.¹⁷¹ The recent litigation over the compact began when Kansas filed a complaint, claiming Nebraska was pumping groundwater from wells that were connected to the Republican River—a claim almost identical to Texas's claim against New Mexico.¹⁷² Nebraska argued that the consideration of groundwater pumping was outside the scope of the compact—a claim strikingly similar to New Mexico's.¹⁷³ The Court acknowledged that compacts are contracts, but it held that even when an interstate compact exists, the Court still has the power to “invoke equitable principles, so long as consistent with the compact itself, to devise ‘fair . . . solution[s]’ to the state-parties’ disputes and provide effective relief for their violations.”¹⁷⁴ Ultimately, although the states were bound by a compact, which the Court previously held should be construed literally, the Court exercised its authority to grant equitable relief to the states to ensure compliance with the compact terms.¹⁷⁵

III. MOVING TOWARD A SUSTAINABLE FUTURE IN THE RIO GRANDE BASIN

The Supreme Court's holding in *Kansas v. Nebraska* makes way for an entirely new guessing game when predicting how the Court will rule on the Rio Grande dispute between Texas and New Mexico.¹⁷⁶ Further, the provisions of the Rio Grande Compact as they are today—based on 1929 river conditions—cannot be followed in a way that would equitably satisfy the interest of either state or the interest of the resource itself.¹⁷⁷ In fact, when considering factors such as increasing populations, temperatures, evaporation rates, and groundwater use—which all result in decreasing river flows—the provisions of the Compact are nearly impossible to follow at all. Regardless

169. *Kansas v. Nebraska*, 135 S. Ct. 1042 (2015).

170. *See Behm*, *supra* note 142, at 403–05.

171. *Kansas*, 135 S. Ct. at 1049.

172. *Id.*; Brief for Texas, *supra* note 131, at 16.

173. *Kansas*, 135 S. Ct. at 1050; Brief for New Mexico, *supra* note 137, at 2–5.

174. *Kansas*, 135 S. Ct. at 1052 (alterations in original) (citing *Texas v. New Mexico*, 482 U.S. 124, 134 (1987)).

175. *Id.* at 1057.

176. *See id.* at 1064.

177. *See supra* Part II.B.3 (explaining the historical significance of the 1929 Compact).

of what the Court holds, the states will still be at odds, the provisions of the Compact will still be frozen in time, and the Compact will still need to be amended and restructured.

A. Predicting How the Supreme Court Will Hold

The Supreme Court has postponed its ruling on the merits of the Texas–New Mexico dispute, and it has remanded the case to a newly appointed Special Master.¹⁷⁸ Now that the Court has allowed the United States to intervene in the dispute, the Court will finally have to hear the case on its merits and rule for one state or the other.¹⁷⁹ Based on the Court’s volatility and unpredictability in the context of interstate water disputes, it is difficult to predict which state will prevail in the litigation.¹⁸⁰

For several decades in the context of interstate water disputes, the Supreme Court declared and asserted “its power to effect the equitable apportionment of an interstate river.”¹⁸¹ The Court exercised this power between states that had identical or similar water rights systems.¹⁸² When states were unable to equitably apportion interstate waterways between themselves, the Court did it for them.¹⁸³ Before the Court began exercising its power, it emphasized the importance of equitable apportionment among states and encouraged states to follow equitable considerations in their dealings.¹⁸⁴ In several instances, the Court has used the prior appropriation doctrine—similar to the doctrine upon which New Mexico water laws are based—as a guide in apportioning the waters of interstate rivers among states.¹⁸⁵

In more recent years, the Court has followed principles of contract law in interstate water disputes, holding that an interstate water compact creates a contract that is binding and conclusive.¹⁸⁶ The Court generally considers other types of interstate compacts—ones that do not involve water—to be enforceable under principles of contract law.¹⁸⁷ It has begun to follow suit in the face of interstate water compacts. The Court has held that the Pecos River Compact (between New Mexico and Texas),¹⁸⁸ the Canadian River Compact (between Oklahoma, New Mexico, and Texas),¹⁸⁹ and the Red River

178. Texas v. New Mexico, 138 S. Ct. 954, 960 (2018).

179. *Id.*

180. See generally Griggs, *supra* note 142.

181. *Id.* at 162.

182. *Id.* at 163.

183. *Id.*

184. *Id.* at 162–63.

185. See *id.*

186. *Id.* at 171; see Behm, *supra* note 142.

187. Behm, *supra* note 142, at 403–05. An example of an interstate compact that the Court considered under contract law is one regarding interstate waste management agreements. *Id.*

188. Pecos River Compact, Pub. L. No. 91-184, 63 Stat. 159 (1949).

189. See Behm, *supra* note 142, at 399–401.

Compact (between Texas, Oklahoma, Arkansas, and Louisiana)¹⁹⁰ are all essentially contracts between states and they should be interpreted using principles of contract law.¹⁹¹

Although the Supreme Court had begun to follow a path of contract law interpretations of interstate water compacts, one of the Court's most recent holdings jumped the fence and turned back toward equitable apportionment.¹⁹² In the 2015 case *Kansas v. Nebraska*,¹⁹³ the Court recognized that even with the existence of an interstate compact (the Republican River Compact in this instance), the Court retains the authority to equitably distribute interstate streams among states.¹⁹⁴ The Court scrutinized the compact between the states, but rather than ruling on its language, the Court looked at the suggested purpose and intent of the compact and ruled in Kansas's favor.¹⁹⁵ Kansas argued, and the Court agreed, that the compact's purpose and intent should prevail over the plain language of the compact.¹⁹⁶ With this newest shift in the trend, the Texas–New Mexico dispute before the Supreme Court will compel the Court to decide exactly which concepts it will adopt in its future encounters with interstate water disputes.

1. The Result of the Dispute Will Depend on Which Principles the Court Chooses to Apply

If the Court makes a full transition back to equitable apportionment, it is likely that Texas may prevail in the dispute.¹⁹⁷ If the Court follows the plain language of the Compact, as it has done for the thirty years prior to *Kansas v. Nebraska*, there is a chance that New Mexico may prevail.¹⁹⁸ New Mexico argues that the plain text of the Rio Grande Compact provides that New Mexico must measure and pay its obligation to Texas at Elephant Butte and is not subject to any other obligations after the delivery at Elephant Butte.¹⁹⁹ If the Court follows its thirty-year trend of applying principles of contract law to interstate water compacts, there is a possibility that it will hold the states to the actual language of the Compact.²⁰⁰

190. *Id.* at 401–02.

191. *See id.* at 391.

192. *See id.*

193. *Kansas v. Nebraska*, 135 S. Ct. 1042 (2015).

194. Behm, *supra* note 142, at 395.

195. *See id.* at 411.

196. *See id.* at 393.

197. *See* Brief for Texas, *supra* note 131.

198. *See* Brief for New Mexico, *supra* note 137.

199. *Id.* at 2–5.

200. *See infra* Part II.E.2 (explaining how the Supreme Court consistently took a contractual interpretation approach to interstate water compacts before 2015).

When the Court heard the dispute over the Canadian River Compact between Oklahoma and New Mexico in 1991,²⁰¹ the Court held that it must interpret the compact on its face.²⁰² New Mexico could rely on this holding if it properly construes the holding to be very narrow. New Mexico may have difficulty convincing the Court of the plain-language argument, however, because in *Oklahoma v. New Mexico*, the Court still relied on the compact drafters' intent and the negotiation history between the two states.²⁰³ In response to New Mexico's textual argument, the Court will likely reason here, like it did in *Oklahoma*, that the drafters of the Compact could not feasibly have intended a literal reading of the Compact.²⁰⁴

Although the Court has shown a trend of relying on principles of contract law when considering interstate water compacts, it has not looked only at the plain text of the compacts.²⁰⁵ It has consistently considered the purpose or intent of the compacts in determining how to come to the most just holding under contract law considerations.²⁰⁶ In fact, the Court's holding in its most recent interstate water compact case demonstrates that there may be a deviation and a new trend toward equitable apportionment, which would weigh in favor of Texas.²⁰⁷

If the Supreme Court's holding in *Kansas v. Nebraska* is indicative of a shift back toward a more equitable approach to interstate water compacts, Texas may likely prevail in this dispute.²⁰⁸ Texas, like Kansas, argues that the Court should base its decision on the purpose and intent of the Rio Grande Compact, rather than on the exact language.²⁰⁹ Texas claims that New Mexico's current use of groundwater within the Rio Grande Basin is not compliant with the purpose and intent of the Compact.²¹⁰ If the Court were to agree with Texas, the Court would likely assert its power to equitably apportion the waters of the Rio Grande between the party-states.²¹¹

The Court may encourage the states to renegotiate the Compact to better meet the equitable standards the Court prefers, like it did when it heard its first interstate water dispute in *Kansas v. Colorado*.²¹² The Court may go further than encouraging the states to consider equity by ruling in favor of

201. *Oklahoma v. New Mexico*, 501 U.S. 221 (1991).

202. *Id.* at 229–30; Behm, *supra* note 142, at 401.

203. *Oklahoma*, 501 U.S. at 237; Behm, *supra* note 142, at 401.

204. *Oklahoma*, 501 U.S. at 237; Behm, *supra* note 142, at 401.

205. *See Kansas v. Nebraska*, 135 S. Ct. 1042 (2015); *Tarrant Reg'l Water Dist. v. Herrmann*, 569 U.S. 614 (2013); *Oklahoma*, 501 U.S. 221; *Texas v. New Mexico*, 482 U.S. 124 (1987).

206. *See, e.g., Tarrant Reg'l Water Dist.*, 569 U.S. 614; *Oklahoma*, 501 U.S. 221.

207. *See Kansas*, 135 S. Ct. at 1042.

208. *See id.*

209. Brief for Texas, *supra* note 131, at 16.

210. *Id.*

211. *See id.* at 59–60.

212. *Kansas v. Colorado*, 206 U.S. 46 (1907).

Texas and requiring New Mexico to pay Texas according to Texas's asserted "purpose and intent" of the Compact.²¹³

If the Court holds for Texas, the holding may be an indication to other states in similar interstate water disputes that they should consider renegotiating their compacts to make them more equitable before engaging in lengthy and costly litigation.²¹⁴ Based on the last century of interstate disputes, however, it is unlikely that states will take initiative to renegotiate, and instead, they will choose to litigate the compacts.²¹⁵ For decades, the Court followed an equitable apportionment approach to interstate water disputes, and states still brought litigation over the inequity and noncompliance with compact purposes.²¹⁶

2. The Court's Holding Will Not Solve the Underlying Problem of Flawed Compact Provisions

The disputes that have arisen under the Rio Grande Compact are directly related to its ineffective provisions, which goes to show that the provisions fail to ensure proper compliance and fair apportionment of the water. At the end of the litigation, the Court will hold in favor of either New Mexico or Texas, but the states will be no better off than they were before the Court's ruling. The parties will not return to their respective states with a solution to the problem of being bound by the frozen provisions in the Rio Grande Compact. They will return home with the same exact language of the Compact as they began, which will inevitably result in more of the same litigation over the provisions.

Ultimately, the winner of the Supreme Court battle will not have won the war. Both states will still face the same or similar problems until there is a real solution to the frozen provisions of the Compact. The solution is not one that can be achieved through the judicial process. Neither the parties nor the river itself will ever fully benefit in this particular dispute without substantial and realistic amendments to the Rio Grande Compact.

B. The Current Provisions of the Rio Grande Compact Are Frozen in Time

As the Rio Grande Compact is currently written, the provisions and water payment obligations are essentially frozen in time. The formulas and measurement amounts in the Compact are frozen in 1929, which is the water-flow year upon which the provisions are based.²¹⁷ The provisions are

213. Brief for Texas, *supra* note 131, at 3.

214. *See id.*

215. *See* Kansas v. Nebraska, 135 S. Ct. 1042 (2015); Tarrant Reg'l Water Dist. v. Herrmann, 569 U.S. 614 (2013).

216. *See generally* Griggs, *supra* note 142; Behm, *supra* note 142.

217. Hill, *supra* note 28, at 167, 174.

problematic and make compliance with the Compact an impractical and hopeless endeavor.

At this point, it seems clear that litigation over the apportionment of the river is not the way to solve the problem of unsustainable water supplies. Rather than continue to engage in expensive litigation, the states should renegotiate the provisions of the Rio Grande Compact. The states cannot continue to resort to the current language of the Compact when that language has been the root of many disputes.²¹⁸ Instead, the states must acknowledge the impossibility of the current provisions and agree to renegotiate the eighty-year-old Compact that is based on ninety-year-old data.²¹⁹

1. The Frozen Provisions of the Rio Grande Compact

The purpose of the Rio Grande Compact is to “remove all causes of present and future controversy among [the] States . . . with respect to the use of the waters of the Rio Grande.”²²⁰ The Compact provides that Colorado will deliver a certain amount of water to New Mexico at the Colorado–New Mexico state line.²²¹ Colorado’s delivery amounts are based on 1929 measurements at various gauging sites within Colorado.²²² New Mexico’s delivery to Texas, however, does not occur at the Texas–New Mexico state line.²²³ Instead, the Compact provides that New Mexico delivers its water obligation to Texas at Elephant Butte, where the water payment is then measured and sent downstream to Texas.²²⁴

The Compact includes several tabulations and indices of water levels along the river at various measuring points.²²⁵ The indices are used to calculate the quantity or amount of water that New Mexico owes Texas each year.²²⁶ The indices that were incorporated into the 1938 Compact were a direct reflection of the indices and tabulations that were proposed in the 1929 version of the Compact.²²⁷

The drafters of the Rio Grande Compact sought to maintain the status quo of the time in which the Compact was written.²²⁸ The schedules and tabulations of water payments throughout the Compact were based on the condition of the Rio Grande at the time with the implicit expectation of the

218. *Id.*

219. *See id.*

220. *See* Rio Grande Compact, Pub. L. No. 76-96, 53 Stat. 785 (1939).

221. *Id.* art. III.

222. *Id.*

223. *Id.* art. IV.

224. *Id.*

225. *Id.*

226. *Id.*; *see* Hill, *supra* note 28, at 174.

227. Hill, *supra* note 28, at 167, 174.

228. *Id.*

same or similar continued water use as there was during 1929.²²⁹ With these requirements, the Compact has effectively required New Mexico to deliver water based on conditions of the Rio Grande and population growth rates of the Basin from nearly ninety years ago.²³⁰

2. *The Problem with the Current Language of the Compact*

The Compact continues to govern the distribution of the Rio Grande today, but compliance with provisions that have not changed in ninety years is next to impossible. The indices laid out in Articles III and IV of the Compact directly govern the amount of water that each state is obligated to deliver to its downstream counterpart.²³¹ Those indices are based upon levels of river water in 1929.²³² This means that New Mexico's obligation to Texas in 2020 is still based on the condition of the Rio Grande in 1929.²³³

Since 1929, the population of the Rio Grande Basin has grown exponentially and accordingly, so has water consumption.²³⁴ Further, factors such as rising temperatures, decreasing precipitation rates, diminishing snowpack, and dwindling groundwater resources have all contributed to the decreased amount of water supply in the Rio Grande.²³⁵ In the face of the substantial changes to the river between 1929 and 2020, fulfilling New Mexico's water obligations based on the Compact's 1929 indices leaves nearly no water left for New Mexico to use for itself.²³⁶

The Compact contains no language addressing the possibility of allowing water deliveries to adapt with conditions that affect water availability.²³⁷ Additionally, the Rio Grande Compact does not contain any language addressing the use of groundwater and its correlation to the river's water levels.²³⁸ Because of all the immovable parts of the Compact, the 1929 and 1938 provisions have made the Compact effectively frozen in time.

3. *The Inability to Follow the Frozen Provisions*

It is typical for the southwestern region of the United States to suffer from prolonged droughts and water scarcity.²³⁹ In fact, there have been

229. *Id.*

230. *See* Rio Grande Compact art. IV; Hill, *supra* note 28, at 174.

231. Rio Grande Compact arts. III–IV.

232. Hill, *supra* note 28, at 167, 174.

233. *See* Rio Grande Compact art. IV; Hill, *supra* note 28, at 167, 174.

234. *See* *Rio Grande: In High Demand*, *supra* note 2.

235. RECLAMATION CLIMATE CHANGE AND WATER, *supra* note 2, at 7-1.

236. *See id.*; Hill, *supra* note 28, at 167, 174.

237. *See* Rio Grande Compact arts. III–V.

238. *See* 53 Stat. 785.

239. WILL KORT, CTR. FOR WATER POLICY, CLIMATE CHANGE IMPACTS ON AGRICULTURE IN THE RIO GRANDE RIVER BASIN (Victoria Lubner et al. eds., 2013), https://unm.edu/centerforwaterpolicy/wp-content/uploads/sites/170/2013/10/Rio-Grande_Agriculture_Final.pdf.

instances when the waters of the Rio Grande never reach the Gulf of Mexico.²⁴⁰ The low or in-existent water levels in the river are associated with the rising temperatures of the river itself as well as the declining quality of the water as it makes its way downstream.²⁴¹ The decreased levels are also a result of the heavy water use all along the river, especially in southern New Mexico and West Texas.²⁴² Other factors that contribute to depleting water supplies in the Basin include rising temperatures, declining precipitation, diminishing snowpack, declining runoff, and increasing diversions and extractions of river water and groundwater.²⁴³

The ever-depleting supply and the ever-increasing demand for water in and along the Rio Grande have caused environmental and economic hardships for consumers in the Basin, and compliance with the exact terms of the Compact is impossible.²⁴⁴ New Mexico and Texas producers along the Rio Grande rely heavily on the waters of the not-so-mighty river, but the resource that is increasingly being pulled from the river is not being replenished at a sustainable rate.²⁴⁵ When producers face water shortages, they run the risk of losing millions of dollars in unfruitful production costs and lost profits.²⁴⁶

Consequently, when agricultural producers cannot afford to maintain their farms, they also cannot afford to maintain the wages of their employees, which significantly impairs local economies along the river.²⁴⁷ Agricultural production is one of the largest industries within the Rio Grande Basin, but producers and farmers are not the only people affected by water shortages along the river.²⁴⁸ The Rio Grande is also a source of water used for personal consumption in households and municipalities.²⁴⁹

Unfortunately, there is no legitimate incentive for either state to renegotiate the terms of the Compact, and it is very unlikely that they would ever be inclined to bargain. The Compact does not currently provide for any type of mechanism to allow the states to effectively renegotiate the document.²⁵⁰ Further, even if the states did decide to reconvene and negotiate changes to the Compact, their respective interests in the river are in such stark contrast that it would be impractical to expect the states to agree on any new set of standards.

240. RECLAMATION CLIMATE CHANGE AND WATER, *supra* note 2, at 7-1.

241. *Id.*

242. *Id.* at 7-3.

243. *Id.* at 7-6.

244. *Id.* at 7-12.

245. *See id.* at 7-3

246. *See* KORT, *supra* note 239.

247. *See id.*

248. *See id.*

249. Naveena Sadasivam, *One of the Fastest-Growing Regions of the US Could Run out of Water*, QUARTZ (Aug. 21, 2018), <https://qz.com/1353697/one-of-the-fastest-growing-regions-of-the-us-could-run-out-of-water/>.

250. *See* Rio Grande Compact, Pub. L. No. 76-96, 53 Stat. 785 (1939).

In that light, if the states cannot come to any feasible agreement on amendments to the Compact, Congress should unilaterally amend the Compact to consider factors that affect the availability and sustainability of the limited water supplies within the Basin. Congress retains the power to unilaterally amend interstate compacts because the compacts have the same effect as federal statutory law once ratified by Congress.²⁵¹

In the context of interstate water compacts, Congress also retains the power of congressional apportionment.²⁵² Congressional apportionment allows Congress to unilaterally intervene by passing a statute that provides a method of statutorily apportioning the waters of the Rio Grande with the purpose of putting an end to the dispute over the resource.²⁵³ The problem with this method, however, is that Congress is not likely to be well enough informed about the problems and factors affecting the Rio Grande.²⁵⁴ The lack of knowledge could lead Congress to making a politically charged determination to satisfy the states' demands, rather than a decision guided by the actual climatic and economic issues that face the river.²⁵⁵

Congressional apportionment would not be a practical way to sufficiently solve the current problems in the Rio Grande Basin, which means that there must be a compromise between the party-states to amend and restructure the Rio Grande Compact. The underlying problem in the Texas–New Mexico dispute is the limited water supply upon which the states rely and the frozen-in-time compact language by which the states are bound.²⁵⁶ Without a restructuring of the Compact, the states will never be able to sustainably make use of the river.

C. The Frozen Compact Must Be Restructured by Amending the Language

As it is currently written, compliance with the Rio Grande Compact is impossible.²⁵⁷ The fixed quantities and calculations of the Compact, based on conditions of the river in 1929, are the reason that the states cannot effectively follow the current provisions.²⁵⁸ If a new compact were written and signed by the states in 2020, requiring delivery of water based on quantities determined pursuant to river conditions in 2020, the new compact would be

251. U.S. CONST. art. I, § 10, cl. 3.

252. *Id.*

253. *Id.*

254. See RECLAMATION CLIMATE CHANGE AND WATER, *supra* note 2; KORT, *supra* note 239.

255. See RECLAMATION CLIMATE CHANGE AND WATER, *supra* note 2; KORT, *supra* note 239.

256. See *supra* Part II.D (discussing the Texas–New Mexico dispute, which stems from a water shortage in the Rio Grande Basin).

257. See Rio Grande Compact, Pub. L. No. 76-96, 53 Stat. 785 (1939); RECLAMATION CLIMATE CHANGE AND WATER, *supra* note 2.

258. See *supra* Part II.B.3 (discussing the current Compact and its fixed nature).

obsolete by 2040.²⁵⁹ The reality of the rapid and volatile changes in river conditions must be considered in determining the apportionment of an extremely limited natural resource.²⁶⁰

The Rio Grande Compact is in dire need of a convention and renegotiation to amend its current language.²⁶¹ The Compact itself does not address any future changes in conditions that may develop after the time the Compact was written and signed.²⁶² The indices and tabulations in the current provisions determine how much water each state should pay to its downstream counterpart, but those calculations are based on 1929 conditions of the river.²⁶³ In renegotiating the Compact, the states should remove all language and the provisions regarding the numerical calculations of water obligations based on 1929 conditions.²⁶⁴ The Compact must be refocused to base the states' respective water obligations upon the changing conditions of the river and the factors affecting the conditions.²⁶⁵

In order to ensure the amended Compact provides a framework to which the states are capable of conforming, the provisions must be reconstructed to equitably meet the interests of all parties while maintaining an interest in the sustainability of the water resource itself.²⁶⁶ The waters of the Rio Grande and the hydrologically connected groundwater and aquifers are subject to depletion from various factors that are not considered in the current language.²⁶⁷ The Compact modifications need to acknowledge and encompass considerations of the volatile factors affecting the Basin, which include but are not limited to the following: temperatures, precipitation rates, snowpack, annual runoff, low flow periods, population growth, and groundwater usage within the Basin.²⁶⁸

The amendments should replace the schedules and indices in Articles III and IV of the Rio Grande Compact with water payment requirements based on the availability of water pursuant to factors that affect the river itself.²⁶⁹ The Compact should also assert a purpose of not only meeting the

259. See RECLAMATION CLIMATE CHANGE AND WATER, *supra* note 2 (discussing the volatile changes in river conditions).

260. *Id.*

261. See *supra* notes 26–29 and accompanying text (discussing the need to restructure the Compact).

262. 53 Stat. 785.

263. Hill, *supra* note 28, at 174.

264. See De Stefano et al., *supra* note 4, at 835; Hill, *supra* note 28, at 167, 174; RECLAMATION CLIMATE CHANGE AND WATER, *supra* note 2.

265. See De Stefano et al., *supra* note 4, at 835; RECLAMATION CLIMATE CHANGE AND WATER, *supra* note 2.

266. See De Stefano et al., *supra* note 4, at 835; RECLAMATION CLIMATE CHANGE AND WATER, *supra* note 2.

267. See De Stefano et al., *supra* note 4, at 835; RECLAMATION CLIMATE CHANGE AND WATER, *supra* note 2.

268. See De Stefano et al., *supra* note 4, at 835; RECLAMATION CLIMATE CHANGE AND WATER, *supra* note 2.

269. See De Stefano et al., *supra* note 4, at 835; RECLAMATION CLIMATE CHANGE AND WATER, *supra* note 2.

interests of the party-states but also sustaining the natural resource at issue to ensure the ultimate sustainability of the river and its groundwater counterparts.²⁷⁰

1. The Rio Grande Compact Should Reflect Some Principles from the Model Interstate Water Compact

The Utton Transboundary Resource Center at the University of New Mexico School of Law proposed the Model Interstate Water Compact (Model Compact) in 2007 to help states prevent interstate water disputes and resolve current conflicts through new, more contemporaneous provisions.²⁷¹ The party-states to the Rio Grande Compact would benefit from adopting some concepts from the Model Compact.

First, the Model Compact's proposed purpose is consistent with the Supreme Court's wishes for interstate water compacts: It focuses on the equitable apportionment of the water flows and seeks to protect and improve the quality of "the surface water flows and hydrologically connected subsurface waters of the . . . River and its tributary water bodies within the states" that are parties to the compact.²⁷² The Model Compact considers the importance of the hydrologically connected groundwater that is unquestionably a factor in the apportionment of river water.²⁷³

Next, the Model Compact provides a predetermined duration of the compact rather than making the compact's apportionments permanent.²⁷⁴ This "sunset" limitation on the compact duration seeks to relieve the problem of the compact being set with no prospective amendments or modifications in the future.²⁷⁵ The Rio Grande Compact does not currently provide any duration period and is therefore fixed in perpetuity.²⁷⁶

The Rio Grande Compact should be modified to include a duration period to alleviate the pressure currently on the signatory states to follow the provisions of the Compact in perpetuity and to prevent the Compact from becoming frozen in time like it is in its current capacity.²⁷⁷ A limited duration to the Compact would give the states the opportunity to amend or modify the Compact periodically or even terminate the Compact altogether at the end of

270. See De Stefano et al., *supra* note 4, at 835; RECLAMATION CLIMATE CHANGE AND WATER, *supra* note 2.

271. Jerome C. Muys, George William Sherk & Marilyn C. O'Leary, *Utton Transboundary Resources Center Model Interstate Water Compact*, 47 NAT. RESOURCES J. 17, 21 (2007).

272. *Id.* at 26.

273. *Id.*; see De Stefano et al., *supra* note 4, at 835–37.

274. Muys et al., *supra* note 271, at 33.

275. *Id.* at 33–35.

276. See Rio Grande Compact, Pub. L. No. 76-96, 53 Stat. 785 (1939).

277. See *supra* Part III.B.2 (explaining how the provisions of the Rio Grande Compact are frozen in time because of its fixed calculations).

its duration if the states so wish.²⁷⁸ While the current Compact does provide that the Rio Grande Compact Commission may review the provisions every five years, Article XIII of the Compact provides that the Commission may only review provisions “which are not substantive in character and which do not affect the basic principles upon which the Compact is founded.”²⁷⁹ This suggests that the Commission may not be able to make any substantive changes to the provisions to make the Compact a more progressive governing document.²⁸⁰

The Model Compact further provides for apportionment of quantities of water to each state that are “based on an analysis of the average annual and seasonal flows for the entire period of record, the driest 10-year period of record, and the wettest 10-year period of record, taking into account existing surface and underground storage facilities.”²⁸¹ The Model Compact also calls for uniformity between the signatory states in implementing systems or procedures for measurement of groundwater use, which is factored into and considered to count toward each state’s respective total apportionment of water.²⁸²

While the Model Compact’s method of measurement and apportionment may be more contemporary than the one provided in the current Rio Grande Compact, the measurements would still likely cause states to fall short on their payments as years go by and as the Basin gets hotter and drier.²⁸³ The numerical and formulaic methods of measurement and apportionment proposed by the Model Compact is insufficient to maintain sustainability for the Rio Grande and its hydrologically connected groundwater resources.²⁸⁴ In addition to the measurement and apportionment methods, the Model Compact falls short in other aspects.

2. Reconstruction of the Rio Grande Compact Requires More than the Model Interstate Compact Can Achieve

While the Model Interstate Water Compact provides a blueprint for states to follow, there are nonetheless some significant flaws in its provisions that are similar to those in interstate water compacts currently in place. The flaws would cause its provisions to create the type of problems that current interstate water compacts already raise. If the Model Compact’s provisions

278. Muys et al., *supra* note 271, at 29. It is unlikely that the party-states to the Rio Grande Compact would wish to terminate the Compact altogether, but the Model Compact nonetheless provides that option. *Id.*

279. Rio Grande Compact art. XIII.

280. *Id.*

281. Muys et al., *supra* note 271, at 59–60.

282. *Id.* at 62.

283. See RECLAMATION CLIMATE CHANGE AND WATER, *supra* note 2, at 7-1.

284. De Stefano et al., *supra* note 4, at 835; RECLAMATION CLIMATE CHANGE AND WATER, *supra* note 2, at 7–1.

were implemented into an actual interstate water compact, the compact would eventually—and sooner than later—become frozen in time, just like the Rio Grande Compact has.²⁸⁵

The Model Compact tends to sidestep the most significant problems that states in the West with scarce or depleting interstate surface waters face.²⁸⁶ The Model Compact addresses factors such as population growth and historical river flows, but it fails to consider important factors that affect water availability. The most significant factor is climate change.²⁸⁷ The Model Compact suggests party-states should determine apportionment amounts based upon the average of the ten driest years and the ten wettest years on record within the Basin.²⁸⁸ While that may seem sufficient to determine the *current* average river flows, that average may decrease drastically within a matter of years.

In determining the measurements and quantities of apportionments, the Rio Grande Compact should be amended further—beyond the suggestions in the Model Compact—to specifically consider factors that affect the river flows and availability of water in the Rio Grande.²⁸⁹ The Compact should provide for a consideration of empirical data or projections of temperature increases, precipitation rates, snowpack expectations, seasonality of runoff, and the projected groundwater use along the river—all of which are directly impacted by climate change.²⁹⁰ This may best be accomplished by assigning the calculations and apportionment determinations to a neutral and unbiased commission that is designed to operate in the interest of the water resource, rather than operating only in the interests of the party-states.²⁹¹

Further, groundwater consumption is an essential factor that should be considered in determining water apportionment between the states.²⁹² Groundwater usage should be considered in the Rio Grande Compact because it would resolve the primary issues associated with the claims and arguments between Texas and New Mexico in the current dispute.²⁹³ Likewise, the universal consideration of groundwater in compact language would alleviate a significant amount of tension that arises between states in the decades after interstate water compacts are drafted.²⁹⁴ The overarching concern between Texas and New Mexico is that Texas claims the groundwater use in New

285. See *supra* Part III.B.1 (acknowledging the frozen provisions in the existing Compact and the fixed provisions that made it frozen in time).

286. See Muys et al., *supra* note 271.

287. See *id.* at 50.

288. See *supra* note 281 and accompanying text (discussing the Model Compact's suggestions on apportionment measurements).

289. See Muys et al., *supra* note 271.

290. RECLAMATION CLIMATE CHANGE AND WATER, *supra* note 2, at 7-1.

291. See Rio Grande Compact, Pub. L. No. 76-96, art. XII, 53 Stat. 785, 791 (1939).

292. See *generally* Hawkes, *supra* note 49.

293. See *supra* Part II.D (addressing New Mexico's use of groundwater in the Rio Grande Basin).

294. See *supra* Part II.D (explaining the tension and perpetual disputes between New Mexico and Texas).

Mexico south of the Elephant Butte Reservoir is a violation of the Rio Grande Compact because it affects the amount of water paid to Texas.²⁹⁵ In response, New Mexico has asserted that the plain language of the Compact does not prohibit the use of groundwater along the river, and therefore, does not violate the provisions of the Compact.²⁹⁶ If groundwater usage had been considered in the original Rio Grande Compact, it is possible that much of the ongoing controversy would not have developed.

A reconstructed Rio Grande Compact must embody the underlying principles of sustainability and efficiency.²⁹⁷ The current Rio Grande Compact, similar to the Model Compact, states a purpose of achieving an equitable apportionment of the surface water shared between the party-states.²⁹⁸ The purpose of interstate water compacts must focus on more than just apportionment in order to be effective.²⁹⁹ To combat the inevitable decrease in water availability, a satisfactory and agreeable interstate water compact should centralize its focus around the overall downscaling of water consumption by its party-states.³⁰⁰ In order to save future generations of water consumers from the uncertainty surrounding availability and apportionment, the provisions of the Compact must be designed to effect the gradual but certain reduction in overall use of water resources, and to make progress toward the most efficient uses possible. This will allow for the remaining water resources—surface and groundwater systems—to replenish, and it will result in a more sustainable stewardship of the extremely limited resource.³⁰¹

Further, the Model Compact states that the provisions of the compact would supersede “any present or future state or tribal laws or regulations that are irreconcilably inconsistent with any provision of th[e] Compact.”³⁰² Because interstate water compacts are federal law once they are ratified by Congress, the Rio Grande Compact should provide a form of governance for the groundwater—particularly within the Rio Grande Basin—that would effectively supersede the conflicting groundwater laws between New Mexico and Texas.³⁰³

295. See *supra* Part II.D (discussing claims regarding groundwater use along the Rio Grande in southern New Mexico).

296. See *supra* Part II.D (discussing Texas’s claims that New Mexico’s use of groundwater south of Elephant Butte is in violation of the purpose of the Rio Grande Compact).

297. See De Stefano et al., *supra* note 4, at 835; RECLAMATION CLIMATE CHANGE AND WATER, *supra* note 2.

298. See Rio Grande Compact, Pub. L. No. 76-96, art. XII, 53 Stat. 785, 785 (1939).

299. See *supra* notes 53–54 and accompanying text (explaining the need for interstate compacts to apportion resources).

300. See RECLAMATION CLIMATE CHANGE AND WATER, *supra* note 2.

301. See *Rio Grande: In High Demand*, *supra* note 2.

302. *Texas v. New Mexico*, 462 U.S. 554, 564 (1983); Muys et al., *supra* note 271, at 107.

303. See *supra* Part II.C (discussing the conflicting groundwater laws between New Mexico and Texas).

3. Restructuring the Rio Grande Compact Commission Is Necessary to Properly Implement Compact Provisions

An overhaul and restructuring of the Rio Grande Compact Commission may be the best way to ensure that the party-states work together toward the sustainability of the Rio Grande. The current Commission, created by the Compact, is comprised of a commissioner from each party-state and a nonvoting chairman who is designated to represent the United States.³⁰⁴ The commissioners from Colorado and New Mexico are the states' respective State Engineers as ex officio commissioners, and the commissioner from Texas is appointed by the Governor of Texas.³⁰⁵

The current composition of the Rio Grande Commission is problematic because the commissioners from each state are presumably working only in the interest of his or her respective state and not in the interest of the river basin as a whole. Further, any action by the Commission regarding the administration of the Compact must be a unanimous action between the commissioners, which is unlikely to occur in light of the decades of dispute and litigation since the signing of the Compact in 1938.³⁰⁶

If the Commission were restructured through additional amendments to the Compact, to serve as the regulatory body, the Commission itself would be able to govern the states' compliance to the Compact. The Commission should be restructured to be neutrally objective and to work in the best interest of the water resource itself, as opposed to the interests of the states. The Commission should ensure that the states' obligations under the Compact are in sync with the needs of the resource itself and that its principal focus is the resource's conservation.³⁰⁷ The Commission should be the administrative and regulatory body for the Rio Grande Basin, and its presence should be much more prevalent within the party-states. Its functions should include research and contemporaneous data collection to determine suitable appropriation amounts that will be practical, rather than detrimental, and in the interest of conserving and even preserving the Rio Grande as a scarce and critical resource.³⁰⁸

To achieve its enhanced functions, the Commission should be structured to consist of more than just the states' respective State Engineers and gubernatorial appointees.³⁰⁹ The commissioners from each state should be appointed individuals—in Colorado and New Mexico by the respective State Engineers and in Texas by the governor—who are bound by the Compact to

304. Rio Grande Compact, Pub. L. No. 76-96, art. XII, 53 Stat. 785, 791 (1939).

305. *Id.*

306. *See id.*

307. *See* RECLAMATION CLIMATE CHANGE AND WATER, *supra* note 2, at 7-1.

308. *See id.*

309. *See* Rio Grande Compact art XII.

act solely in the interests of the water resource and river basin as a whole.³¹⁰ The Commission should govern the use and apportionment of the surface water along the entire river, and it should also govern the use and apportionment of the groundwater within the Rio Grande Project region between Elephant Butte, New Mexico and Fort Quitman, Texas.³¹¹

This new Commission's governance should be neutral to any respective state water laws, and the party-states should be governed under a single form of surface water- and groundwater-use framework. For instance, the Texas consumers within the Basin would follow the Commission's groundwater regulations rather than the rule of capture that is the common law in Texas.

4. The Restructured Compact Will Alleviate Supreme Court Volatility

Restructuring the Rio Grande Compact to consider a slew of changing factors that affect the sustainability of river water is the only practical approach to effecting change.³¹² The judicial process that many states have utilized has fallen short in offering a long-term solution to the underlying problems of outdated interstate water compacts.³¹³

If the Court does follow its contract-law analysis of interstate water compacts, New Mexico and Texas would be able to follow the new language of the restructured Compact in a way that is satisfactory to the Court and the states. The new language of the Compact will serve its asserted purpose and intent, like Texas is urging the Court to consider,³¹⁴ and it will adhere to the plain language of the compact, like New Mexico argues.³¹⁵ New Mexico will be following the exact language and will remain in compliance with the Compact while the Compact apportions an equitable amount of water to each state.³¹⁶ The new language will not give a specified quantity of water that must be paid by New Mexico to Texas each year. Rather, the amended Compact will consider the factors that affect water availability and sustainability, such as groundwater consumption downstream from Elephant Butte, and it will base New Mexico's yearly payments and measurements on projected or estimated groundwater use.

310. See RECLAMATION CLIMATE CHANGE AND WATER, *supra* note 2.

311. See *supra* Part II.D (explaining that the region between Elephant Butte, New Mexico and Fort Quitman, Texas is the region in dispute between Texas and New Mexico).

312. See Hill, *supra* note 28, at 163, 167.

313. See *supra* Part II.E (discussing the jurisprudence over interstate water disputes).

314. Brief for Texas, *supra* note 131, at 15–16.

315. Brief for New Mexico, *supra* note 137, at 2–5.

316. *Id.*

IV. CONCLUSION

The litigious approach, through the original jurisdiction of the Supreme Court, will not solve the problems that states face today. The Rio Grande Compact must be restructured in order to ensure a more feasible and sustainable future for the precious oasis in the middle of the Chihuahuan Desert. The Rio Grande Compact has been frozen in time since the day it was ratified. The fundamental reliance on the 1929 conditions of the river, coupled with the immovable provisions, have left the party-states with a grim future regarding the apportionment of the Rio Grande.

Changing conditions, such as population growth, climate change, decreasing river flows, and groundwater usage, all have and will continue to ensure that the struggles and shortages endured by the states over the last eighty years will always be present. The provisions of the Rio Grande Compact are based on historical assumptions that have been rendered simply impossible to follow; the Compact demands a restructuring that reflects the changing conditions impacting water sustainability within the river.

At a foundational level, a revised Compact cannot simply carve up the available water resources and mathematically allocate it to each party-state. If the river and the communities who rely upon it are to survive without endless disharmony and uncertainty, the Compact must be based on the fundamental principles of reducing consumption and anticipating diminishing water availability. The new Compact must serve the interest of the river as a natural resource interconnected with the communities like Hatch, New Mexico and the families who have lived there for generations. The Compact must do more than allocate water; it must create the circumstances for a sustainable habitat and a fair and realistic method of determining how much water is available and eligible for use.

The Compact must also restructure the Rio Grande Commission to operate in the best interest of the resource itself, rather than in the interests of the states. Because interstate water compacts cannot be based on fixed quantities isolated from real world variability, the Compact must identify a larger role for the Commission to play in monitoring the changing availability of the finite resource that it seeks to govern. An amended and restructured Rio Grande Compact will ensure that sustainability is the first priority within the Rio Grande Basin. Further, with a greater role assigned to the Commission in overseeing and enforcing the Compact's provisions, the Compact will most efficiently and effectively apportion the river's water amongst the states to serve in the best interests of all states involved. Most importantly, however, the restructured Compact will serve in the best interest of the Rio Grande as the treasured resource that it is.