THE RIO GRANDE/RIO BRAVO WATER DELIVERIES UNDER THE 1944 TREATY: A COMPENDIUM OF IDEAS

•EXECUTIVE SUMMARY•

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Disclaimer: Opinions expressed are solely those of the author, interviewees, or third-party authors, and do not represent the views or positions of the USIBWC, the Mexican Section of the IBWC (MXIBWC), or the International Boundary and Water Commission (IBWC).

About The Author

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"Considered in the light of previous treaties relating to the use of water from international streams for various purposes, it is not improbable that the [1944 Treaty]...may come to be regarded as the most important of its kind in the history of the world, both in the range and scope of its provisions and in its social and economic significance. It is more than a mere division of water between the two countries; it provides the administrative machinery and the principles for international cooperation in the development of these water sources."

Dr. Charles A. Timm, Division of Mexican Affairs, U.S. Department of State
March 25, 1944

Part I:

INTRODUCTION: THE CHALLENGES OF WATER DELIVERIES

The iconic river that defines the border between the United States and Mexico, called the Rio Grande in the United States and the Rio Bravo in Mexico, is a shared water subject to a 1944 bilateral water treaty ("the 1944 Treaty") and other bilateral agreements, as well as the laws of the U.S., Mexico, and the states of each country. It is one of the most water-stressed systems in the world.

In the 1944 Treaty, the United States and Mexico, "animated by the sincere spirit of cordiality and friendly cooperation which happily governs the relations between them," established water delivery obligations for the Rio Grande (named the Rio Bravo in Mexico) from Fort Quitman, Texas, to the Gulf of Mexico. The International Boundary and Water Commission (IBWC) administers and enforces the Treaty.

The IBWC is an international entity made up of two distinct sections: the United States Section of the International and Boundary Water Commission (USIBWC), and the Mexican Section, the Comisión Internacional de Límites y Aguas (MXIBWC, sometimes referred to colloquially as CILA), each headed by an Engineer-Commissioner appointed by his or her respective country's president. When acting together, USIBWC and MXIBWC make up the IBWC, which has the authority to interpret and implement the 1944 Treaty and other binational agreements.

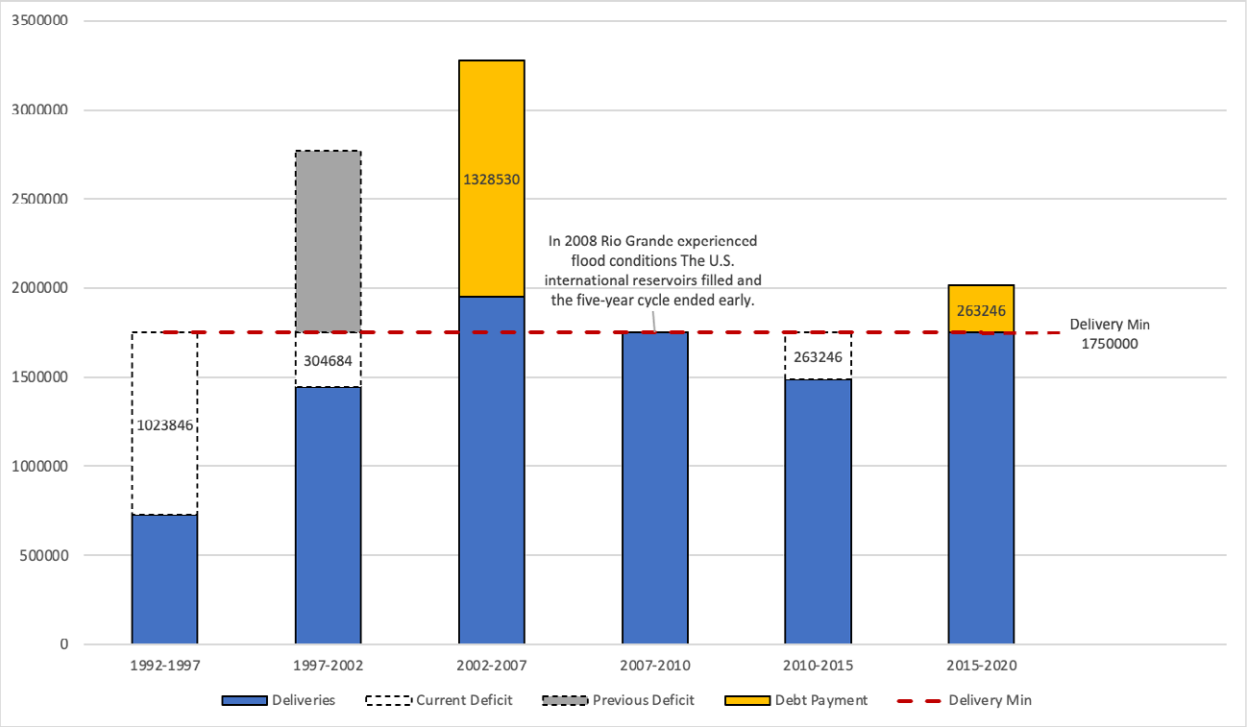
Under the 1944 Treaty, Mexico is obligated to deliver to the United States not less than 350,000 acre-feet (AF)(431,721,000 cubic meters) as an average amount annually over cycles of five consecutive years, for a total delivery of 1,750,000 AF in a cycle. (An acre-foot is about 326,000 gallons of water, enough to cover an acre of land–about the size of a football field–to the depth of one foot.) The 1944 Treaty provides that " [i]n the event of extraordinary drought... any deficiencies existing at the end of the aforesaid five-year cycle shall be made up in the following five-year cycle."

For the most part, deliveries have worked effectively to the benefit of both countries for almost eight decades. But since 1992, Mexico has not met its Rio Grande delivery obligations three times within a five-year cycle, ending the cycles of 1992-1997, 1997-2002, and 2010-2015 in deficits. Each of those debts was carried over to the following consecutive cycle, and each was paid.

There also were shortfalls in the average minimum annual deliveries of 350,000 AF toward the end of the 2002-2007 and 2015-2020 cycles that were addressed very close to the end of those cycles–in one, within two months, and in another, within three days. But the shortfalls created tension and uncertainty.

The result has been unpredictability in the deliveries of Rio Grande water for the United States, impacting water users in both Mexico and the United States. Deliveries can be affected by a number of complex factors, including drought, water scarcity, extreme weather, climate change, and political considerations.

Here is a graph illustrating the deliveries between 1992-2020. Deficits that originated within three of the five-year cycles since 1992 are shown in white; an additional carry-over deficit amount in 1997-2002 is in gray; and debt payments are shown in orange. Note that in the 2002-2007 cycle, Mexico delivered more than the 1,750,000 AF mandated by the 1944 Treaty.



Graphic: Deliveries from cycles beginning in 1992 through 2020
Source: Author

Here is a chart describing the deficits at the end of the three cycles, and the shortfalls within cycles that resulted in two close calls, since 1992:

Rio Grande water delivery close calls and misses since 1992

Cycle Years	Delivery Status	Resolution
1992-1997	Deficit of 1,023,846 AF at the end of the 1992-1997 cycle	Deficit from 1992-1997 was rolled over to the following 1997-2002 five-year cycle
1997-2002	In the 1997 -2002 cycle there was a shortfall of 304,684 AF at end of 4th year (2001); The cycle ended in 2002 with that deficit plus the deficit from 1992-1997 of 1,023,846 AF, for a total deficit of 1,328,530	Deficit from 1992-1997 and 1997-2002 was paid fully in 2005 by agreement
2002-2007	An agreement in 2005 resolved the carry-over deficit from 1997- 2002, but a shortfall remained of about 350,000 AF two months before end of 2002-2007 cycle	Mexico completed the 2002-2007 deliveries in the last two months of 2007 and the cycle ended without a deficit
2007-2009	In 2008, the Rio Grande experienced flood conditions originating in the Conchos River, a Mexican tributary	The U.S. conservation capacity at the two international reservoirs filled and the five-year cycle ended early. A new cycle began in 2010
2010-2015	Deficit of 263,246 AF at the end of the 2010-2015 cycle	Deficit was rolled over to 2015-2020 cycle, and Mexico paid off the debt within 3 months (by January 25, 2016)
2015-2020	A new shortfall accumulated in the 2015-2020 cycle and remained until three days before the end of the cycle in 2020	3 days before the end of the 2015-2020 cycle, Mexico agreed to transfer the volumes of Mexican water stored in Amistad and Falcon required to end the cycle without a deficit

The challenges posed by the shared waters of the Rio Grande are more than merely academic. The Rio Grande is the lifeblood to agriculture and to the wider economies of metropolitan areas in the Rio Grande Basin, which are growing. Scarce water in the Rio Grande Basin has serious economic consequences in both Mexico and the United States. An annually growing population in the Rio Grande Basin, reflecting population growth worldwide, exacerbates the water challenges.

Mexico and the United States have a mutual interest to provide greater predictability and reliability in Mexico's deliveries annually, and to minimize the risk for carrying over deficits to the following consecutive cycle.

Part II

Purpose and Organization of the White Paper

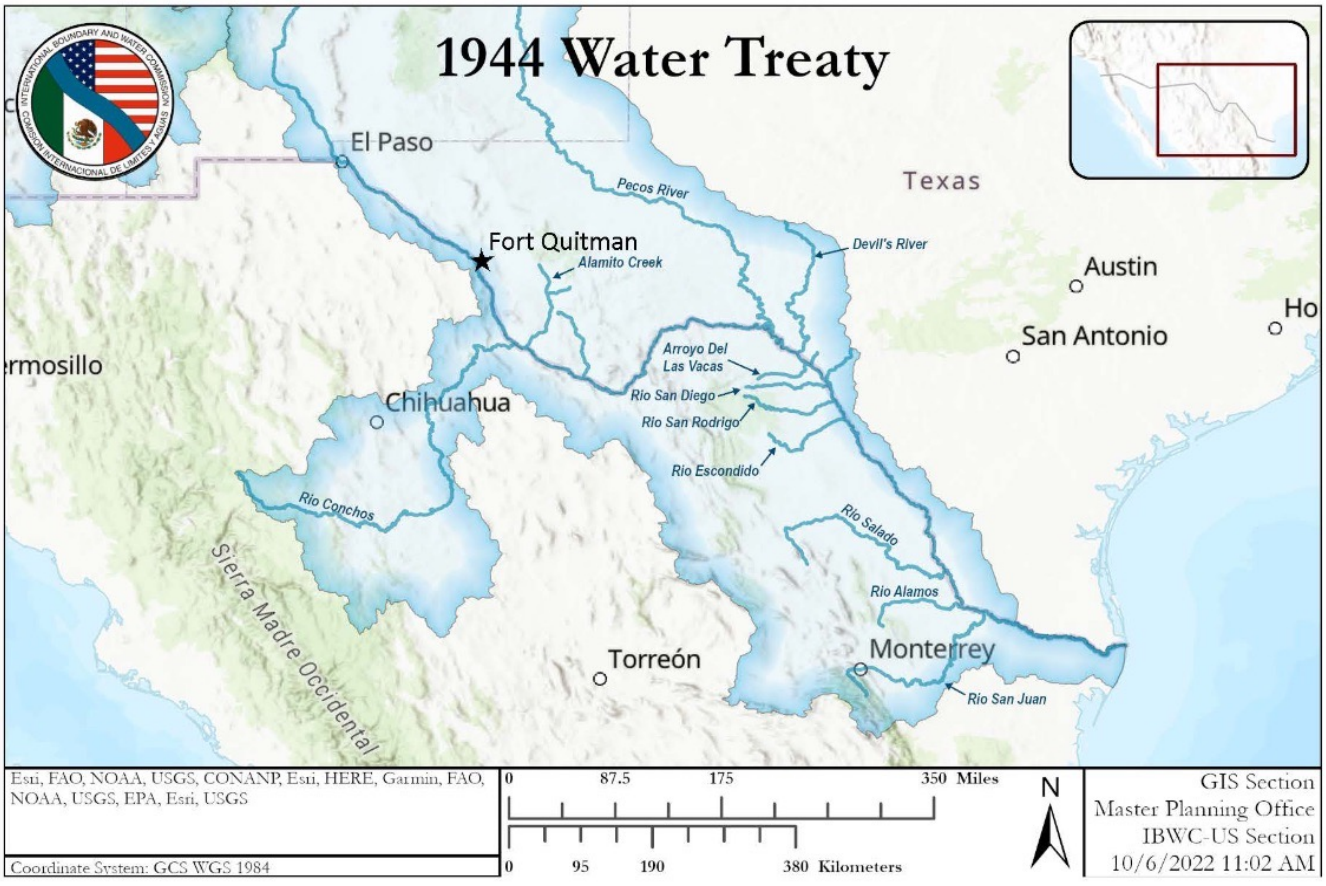


Figure: 1944 Water Treaty map
Source: USIBWC

The 1944 Treaty is an extraordinary achievement among binational treaties in its complexity, and has enjoyed general acceptance by Rio Grande stakeholders for almost eight decades, as evidenced by the resolution of many disputes under the Treaty without conflict. Under the Treaty's terms, disputes and implementation can be addressed by the IBWC, through implementing agreements called "Minutes." To that end, the IBWC has stated a goal to develop a Minute by the end of 2023 that would further greater predictability and reliability in Rio Grande deliveries.

USIBWC commissioned a white paper on June 2, 2022 for assistance in gathering information in support of the further dialogues and studies needed to develop a Minute that begins to address these challenges. The purpose of the white paper is not to mandate any particular recommendations or solutions, but to serve as a foundation–a starting place–for the critical discussions needed going forward between the countries. It is a compendium of ideas that can serve as a resource. The white paper is limited to considerations under the 1944 Treaty of the stretch of the Rio Grande from Fort Quitman to the Gulf of Mexico.

The white paper summarizes the physical and scientific background on the Rio Grande ecosystem and species; describes the Treaty, selected Minutes, and certain applicable U.S. and Mexico law relevant to the discussion; reports on U.S. and Mexico stakeholder views expressed in interviews about water delivery issues, concerns, and challenges on the Rio Grande; discusses the Colorado River lessons learned identified by stakeholders; and compiles the potential solutions that have been suggested over the past 20 years to support more predictable, reliable water deliveries. Appended to the paper are timelines for the Rio Grande and the Colorado River; a proposal from NGO stakeholders for consideration; and selected original documents not readily available and provided with permission.

Managing the Rio Grande may be among the most difficult environmental issues we face, but its underlying challenges are not unique. And as on all rivers, water users at the top of the system can restrict the availability of water to those users at the bottom of the system. This remains a challenge on the Rio Grande despite the 1944 Treaty.

Part III

The Heart of the White Paper: U.S. and Mexico Stakeholder Interviews

A rich background of custom, culture, science, and law is reflected in the shared activities by Mexico and the United States, two nations with over 170 years of coordination and cooperation surrounding the Rio Grande. While the white paper provides information about the current situation and tasks at hand, the heart of it is the information from a series of interviews from June through October, 2022 with key individuals across 55 diverse stakeholders from the United States and Mexico.

The issues stakeholders identified in discussions over the summer and fall of 2022 shaped the content of the paper.he three questions asked in interviews. The discussions centered around the following three open-ended questions:

1. What do you see as the potential challenges to predictable and reliable Rio Grande water deliveries under the 1944 Treaty?
2. What can we learn from the Colorado River experience, particularly with Minutes 319 and 323, that may provide lessons that can be applied successfully on the Rio Grande under the 1944 Treaty?
1. What ideas or solutions would you suggest as a way forward to help overcome the potential challenges facing us on the Rio Grande?

Here is a chart summarizing the views expressed by the U.S. and Mexico Rio Grande stakeholders interviewed:

Summary of Views Expressed by U.S. and Mexico Rio Grande Stakeholders Interviewed		
There Is Agreement Across Stakeholders on Several Factors that Will Promote Reaching Solutions	A defined problem: predictability and reliability in deliveries	Keen interest on all sides to address the challenges
		A goal to pursue a Minute by the end of 2023 that could help foster more predictable and reliable deliveries
		Awareness of the need to address water scarcity among the public, making cooperation and funding more available
	A defined leadership structure in place to tackle challenges	The IBWC is in place to provide the leadership and authority needed to address the challenges
		Other pertinent government organizations, NGOs, and stakeholders have a great interest in addressing water scarcity, greater operational certainty, and the health of the system, contributing to leadership
	80 years of experience under the 1944 Treaty	The 1944 Treaty has worked for decades in reaching solutions and avoiding conflict
		U.S. and Mexican stakeholders recognize that the Treaty works to address anticipated and unexpected challenges that have been faced
	The 1944 Treaty provides flexibility to address the issues that "hard" law, with its prohibited and regulated activities, does not	The Treaty gives the two countries authority to interpret and implement it through Minutes, without the need to revisit and amend the Treaty
		Minutes offer the opportunity for comparatively quick adjustments needed when the two countries agree
	The science and modeling needed to address water issues is continuously improving	Increasingly sophisticated science and modeling is available to the parties than ever before to consider when crafting solutions
		The IBWC International Working Groups, and its authority to create additional groups as needed, promote the communication required to address challenges

There is Agreement Across Stakeholders that the Single Biggest Challenge to a Possible Solution is Lack of Trust	Trust Concerns Shared by U.S. and Mexico Stakeholders	Lack of the kinds of relationships and communications that foster solutions
		Lack of shared information about how internal systems are operated day-to-day and different views on what a reading of the Treaty requires in some aspects
		Conflict between states in Mexico about water allocation internally, and some agricultural stakeholders' views on water ownership, is impacting deliveries to the U.S.
	U.S. Stakeholders' Trust Concerns	Lack of understanding about how Mexico operates its system in releasing water, and concerns that Mexico has not been forthcoming with details about internal operations and water availability
		Since 1992, Mexico did not meet its delivery obligations at the conclusion of the following 3 cycles: 1992-1997, 1997-2002, and 2010-2015, and accrued shortfalls in the last year of two of the cycles: 2002-2007, and 2015-2020
		U.S. interviewees are united in voicing concern and frustration about the lack of predictable and reliable deliveries and the tension this unpredictability creates
		The U.S. is not treated as a user in the Mexico system, and is not viewed by some stakeholders in the agricultural community as holding water rights
	Mexico Stakeholders' Trust Concerns	Lack of understanding about the operations of the water system in the U.S. (particularly operations in Texas)
		Concerns about the potential for over-delivery of water viewed by some stakeholders as owned by Mexico, in periods of extreme weather events
		The perception that, with greater economic resources available, the U.S. is in a better position to address water scarcity than Mexico
		Lack of U.S. acknowledgment of political concerns among states in Mexico and among stakeholders in the agricultural community about water allocation internally

There is Disagreement Across Stakeholders about the Meaning of Certain Treaty Provisions	Stakeholders over the years have debated about the following questions under the Treaty	Is the delivery from Mexico to the United States of 350,000 acre-feet a year treated as a requirement or a goal?
		What is the definition of “extraordinary drought" as applied to carry-over deficits under the Treaty?
		Can delivery obligations be carried over to a second cycle or even a third cycle, and how does a carry-over impact the delivery obligations for that next cycle?
		Can and should San Juan River water be applied towards Mexico's delivery obligations?
		What does the language in Minutes 308 and 309 require?
There is Agreement Across Stakeholders that Past Exclusion of Environmental Flows and NGO Participation is A Concern	The Importance to Stakeholders of NGO Participation and Environmental Flows Considerations	There is concern about the historic lack of NGO participation in Rio Grande deliberations
		In the Colorado River experience, for the first time, NGOs participated in the developments of 319 and 323, and were widely viewed by interviewees as a key piece of the success of those outcomes
		Rio Grande stakeholders in the U.S. and in Mexico support greater involvement of NGO representatives
There is Agreement Across Stakeholders that Security and Unauthorized Use Impact Water Availability	Stakeholders interviewed from Mexico and the U.S. identified unauthorized activities as a challenge to the U.S.-Mexico management of water deliveries	Some users fail to pay dues and deplete water beyond their allocated quotas
		Some users engage in water theft, siphoning off water in particular localities and illegally selling it at inflated prices
		Illegal activity has affected water availability and the ability to monitor projects in Mexico
		Some U.S. stakeholders also stated their belief that “canal riders” receive payment to divert additional water to farmers in the U.S.

Part IV
Lessons Learned from the Colorado Experience with Minutes 319 and 323

Photo: Colorado River
Source: Water Education Foundation

The Colorado River had been a source of conflict between the U.S. and Mexico, and among the seven U.S. Basin States–Arizona, California, Colorado, Nevada, New Mexico, Utah, and Wyoming–for over a hundred years. But the IBWC's more recent experience over the past two decades, successfully addressing shortage and environmental challenges on the Colorado River, provides insight into a potential way forward on the Rio Grande.

With the All-American Canal lining in 2009 resulting in seepage loss into Mexico, the relationship between the U.S. and Mexico was tense. The countries entered into a series of Minutes, incrementally, to rebuild the relationship. Colorado River Minutes 316, 317, and 318 were important small steps in this effort to build cooperation and trust, and a necessary foundation before the larger, cutting-edge concepts in Minute 319, a pilot, could be negotiated. The parties, including the states and federal governments of both countries, NGOs, water and irrigation districts, and the IBWC, worked together on Colorado River Minutes 319 and 323, officially establishing several binational working groups that focused on discrete practical problems that affect compliance with the 1944 Treaty. With the IBWC's leadership, stakeholders adopted a collaborative approach to resolving problems across the watershed.

While the specific resolutions for these two giant rivers may differ, elements that made collaboration achievable on the Colorado River can be applied to the Rio Grande.

Colorado River Minute 319, which expired in 2017 and was replaced by Minute 323, went a long way toward addressing many issues on the Colorado River. Minute 319 , "Interim International Cooperative Measures in the Colorado River Basin through 2017 and Extension of Minute 318 Cooperative Measures to Address the Continued Effects of the April 2010 Earthquake in the Mexicali Valley, Baja California", was signed on November 20, 2012. It allowed for temporary adjustments to water deliveries from the U.S. to Mexico from the Colorado River based on basin drought or surplus water conditions, joint investments to create greater environmental protection, measures to provide incentives for water conservation, and water storage for Mexico in United States upstream reservoirs. Some also view Minute 319, when taken together with two prior and related Minutes 242 and 318, as recognizing environmental uses as a beneficial use for the Colorado River basin's treaty waters.

Minute 323 ("Extension of Cooperative Measures and Adoption of a Binational Water Scarcity Contingency Plan in the Colorado River Basin") signed on September 21, 2017, extends or replaces key elements of Minute 319. It expires on December 31, 2026. Minute 323 is a set of binational measures in the Colorado River basin that provide for binational cooperative basin water management, including environmental flows to restore riverine habitat. Minute 323 also provides that Mexico would continue to share in Colorado River cutbacks during shortage conditions in the U.S. portion of the basin, and designates a "Mexican Water Reserve" through which Mexico can delay its water deliveries from the United States and store its delayed deliveries upstream at Lake Mead, thereby increasing the lake's elevation, similar to the measures adopted under Minute 319.

Stakeholders interviewed for the white paper were asked "what can we learn from the Colorado River experience, particularly with Minutes 319 and 323, that may provide lessons that can be applied successfully on the Rio Grande under the 1944 Treaty?" The overwhelming majority interviewed

Photo: Pulse Flow Release Ceremony (Morelos Dam)
Source: IBCW

replied that there were two key factors that allowed the parties to reach the solutions in Minutes 319 and 323: (1) the establishment of trust by building relationships through committee meetings and related gatherings, and (2) the inclusion of NGO representatives in the work.

The Colorado River experience was, and continues to be, an iterative process–building trust, educating, and working with key stakeholders over time to progress from Minute 317, to 318, to the pilot project in 319, and finally to Minute 323. Rio Grande improvements are sure to require a similar iterative route.

Part V

Summary of Potential Actions Identified that Could Improve Predictability and Reliability of Deliveries

Here, then, are the stakeholder suggestions, Grouped in three categories and numbered for ease of reference: suggestions that address interim actions and cooperative measures for the Rio Grande/ Rio Bravo along the lines of Colorado River Minutes 317, 318, 319, and 323; suggestions that involve infrastructure; and other measures that could promote more predictable and reliable deliveries. The list includes actions that previously have been suggested over the years, and ideas more recently raised. Each of these actions would require further analysis to determine feasibility, cost, and funding.

Photo: Rio Grande at Santa Elena Canyon, Big Bend National Park TX.
Blog Traveling with Tom

MEASURES BASED ON THE COLORADO RIVER EXPERIENCES WITH MINUTES 317, 318, 319, AND 323

1. Create multiple additional venues for interaction among the parties and stakeholders, and cast a wide net for participation, creating several working groups and scheduling multiple smaller meetings.
2. Develop management criteria for releases from the Conchos, providing for releases from upstream dams on the Conchos to downstream international dams when there are storms, with release criteria tied to defined upstream dam levels, as is similarly done on the Colorado River.
3. Expand the supply of water in Mexico and the U.S. with programs, conservation, and funding, including programs for salinity improvements and desalination projects, crop conservation, canal lining, and other proposed water conservation and storage projects, both small and large.
4. Explore whether the U.S. Federal funding available for the Colorado River in the U.S. and Mexico through the Infrastructure Bill and the USDA to address drought through projects that provide a federal benefit, is available for the Rio Grande to fund conservation in Mexico for desalination, implementation of water-saving agricultural practices, and environmental flows.
5. Implement environmental solutions for the Rio Grande, including eliminating invasive, high-water-consuming plant species, encouraging native water-conserving species, and providing environmental flows, particularly in the Big Bend area, to begin to restore river health and better support animal and plant species

INFRASTRUCTURE MEASURES

6. Consider the **Morillo Drain improvement project** for the canal to address salinity and volume, estimated at a cost of $7.8 million (138 million pesos) to attain 3 cubic meters per second, and $25.8 million (493 million pesos) to attain 4 cubic meters per second (cost values are for the year 2022)
7. Consider a **Desalination Plant to treat the waters from the Morillo Drain**, which would recover nearly 24% of the minimum annual average delivery volume to the United States under the 1944 Treaty and is estimated to cost $40 million (824 million pesos),adjusted to 2022
8. **Falcon-Matamoros Aqueduct.** In 2008, Mexico suggested construction of an aqueduct from Falcon Dam to Matamoros, to convey the city's municipal water supply in a way that would greatly reduce conveyance losses. Currently, releases of 353 cfs or 255,000 acre-feet annually (10 cms or 315,000 TCM annually) are required to deliver 106 cfs or 77,000 acre-feet annually (3 cms or 94,600 TCM annually) to the city. Studies prepared and presented by the Tamaulipas state government mentioned that the project also would reduce conduction, evaporation, and infiltration losses. The estimated cost of the project in 2008 was $295 million dollars (6 billion pesos) for a 160 mile aqueduct that could yield 178,000 acre-feet (220,400 TCM) in saved water.
9. **Brownsville-Matamoros Weir.** In 2008, the Brownsville-Matamoros Weir was originally to be located 12.9 miles downstream of Gateway Bridge, with a capacity of 60,000 acre-feet. This original location was objected to by Mexico in favor of construction of a weir at 8.02 miles (12.9 km) downstream of the Matamoros-Brownsville International Bridge (Gateway). The project would replace the functions of the Retamal dam. The Mexican Section was concerned about potential flooding in Matamoros, and therefore would like to consider a weir at a different

site that is acceptable to both countries. In response to the project concept, some stakeholders expressed concern that those flows to the Gulf of Mexico should not be impeded.

10. Improvement of existing infrastructure. IBWC and CILA studies have addressed the construction and improvement of the existing infrastructure, including the Boquilla, Luis L. Leon, and Francisco I. Madero Dams on the Conchos River to improve their capacity so they could store additional water. Other considerations have included improving conveyance and channel capacity below outlet works of the Marte R. Gomez Dam on the San Juan to support the additional U.S. demand for San Juan water and address operational concerns of accepting San Juan water. The U.S. has expressed interest in having additional water to meet Treaty delivery obligations, perhaps in the form of a water exchange. Provide for use of San Juan water under certain criteria, including only using San Juan water in drought, and possibly giving less than full credit against Mexico's Treaty obligations for the volume delivered, resulting in allowing the U.S. to put the water to use during drought and enhance reliability of deliveries.

OTHER MEASURES

11. Extend the flexibility of water sources used in a second five-year cycle under Minute 234 to a first five-year cycle that is currently allowed under Minute 234 in the second five-year cycle (sources could include giving credit for water in excess of the minimum quantity allotted to the U.S. from tributaries; water allotted to Mexico from the tributaries if Mexico gives advance notice and the U.S. is able to conserve the water; and transfers of Mexico water stored in the international reservoirs if the U.S. is able to store and use them).
12. Develop management criteria for releases from the Conchos, providing for releases from upstream dams on the Conchos to downstream international dams when there are storms, with release criteria tied to upstream dam levels .
13. In the annual allocation process by CONAGUA, consider the U.S. as a "user" in the system--this would allow the U.S. to better plan, even if no allocation is given that year.
14. Make the U.S. a priority user on the Rio Grande, and Treaty compliance for deliveries to the U.S. a first priority for Mexico, as the U.S. has done on the Colorado River for deliveries to Mexico.
15. Provide a mechanism to give credit to Mexico when deliveries are made and subsequent storm events result in "over deliveries" of water, if Mexico agrees to make annual-based flow deliveries.
16. U.S. and Mexican investment in water conservation projects in the Conchos River Basin with a commitment to deliver conserved volume to the Rio Grande in a way that benefits the ecosystem in the Big Bend region and water supplies for both countries.
17. State of Texas or water district funds for conservation projects in the Rio Grande Basin in Mexico, with water transferred to the U.S. at Amistad or Falcon international reservoir.
18. State of Texas funding for part of Mexico's share of Amistad Dam mitigation project cost, with water transferred to U.S. at Amistad or Falcon international reservoir.
19. Federal funding for water conservation projects in Mexico, with conserved water released to the Rio Grande for environmental flow in the Big Bend are and regular water accounting (⅓ U.S. and ⅔ MX) at the confluence.

20. State of Texas or water district funding for water conservation projects in Mexico, with conserved water released to Rio Grande; U.S. receives ⅓ share plus agreed-upon amount resulting from water conservation project.
21. Update the 2011 Lower Rio Grande Basin Study.
22. Create an Environmental Work Group to look at flow, sediment, and species generally, and consider a project on environmental flows in Big Bend; consider creating additional Work Groups to address Projects, Salinity, and other topics as needed.
23. Address the groundwater/surface water connection on the Rio Grande and the effects on water quality and quantity in a white paper.
24. Expand sustainable water measures through education and projects that promote conservation, recycling, and reuse of water, particularly in the agricultural sector, in both countries.
25. Encourage leading stakeholders in Mexico and Texas to create a stand-alone non-profit organization for the Rio Grande akin to the Colorado River Symposium or the Colorado River Water Users Association, to convene stakeholders periodically to discuss Rio Grande challenges and solutions. Create a network of invited stakeholder committees with representatives of farmers, water users, and NGOs from both countries.
26. Other solutions that would require further study have also been identified, such as rainwater reclamation and investment in programs to improve irrigation efficiency, wastewater recovery and treatment, and crop substitution. In 2013, the Lower Rio Grande Basin Study also identified Brackish Groundwater Desalination as the strategy best suited to meet the region's long term water needs.

Part VI
Conclusion: Next Steps

While stakeholders currently may disagree about how best to meet the challenges of water scarcity and delivery, there is agreement on a number of points that can form the basis among them for meaningful discussions and, ultimately, solutions to the issue of predictable and reliable delivery of Rio Grande water by Mexico to the U.S. under the 1944 Treaty.

Several factors suggest that the U.S. and Mexico can reach agreement over time and with more communication. Both countries agree that there are defined problems–lack of reliable water deliveries and water shortages–and are interested in addressing them. The parties have almost 80 years of experience working together to avoid serious conflict under the 1944 Treaty, and the 1944 Treaty provides them flexibility to innovate solutions. The IBWC is providing leadership to include a wide array of stakeholders and points of view. Many possible solutions to improve the situation are already being discussed and considered among the stakeholders. These factors all bode well for improvements on the Rio Grande.