

Rio Grande Water Deliveries Under the 1944 Treaty: A Compendium of Ideas

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About the Author: Kathy Robb, Esq.

- Kathy Robb is a nationally-recognized environmental lawyer and the founder of Robb Water Partners LLC, a water policy and law consultancy. Her experience of over 35 years as a partner in a large law firm, where she co-headed the environmental practice and founded the Water Policy Institute, includes transactional advice and litigation in federal district and appeals courts and the U.S. Supreme Court on water supply, regulatory policy, contaminated river and groundwater, and endangered species on several river systems across the United States. She also served as CEO of Blue Access LLC, a sustainable finance company focused on water.
- She currently serves as the President of the Environmental Law Institute’s Leadership Council in Washington, DC; the chair of the National Water Law Forum, which she co-founded; a co-founding director of BlueCommons, Inc., a community Blue Bank; and the vice-chair of the Waterfront Alliance in New York City. She was elected in 2016 to the American College of Environmental Lawyers, where she serves on the Executive Committee. In 2017, she was named as one of the “Sustainable 100” by New York’s City and State.
- She is a prior chair of the American Bar Association’s Annual Water Law Conference, and a former adjunct professor at the Elizabeth Haub School of Law at Pace University where she taught a seminar on international environmental law and human rights for eight years. She clerked for the Honorable Glen M. Williams in the U.S. District Court for the Western District of Virginia. She holds a J.D. from the University of Virginia School of Law and a B.A. from the University of Texas at Austin in the Plan II Interdisciplinary Honors Program. She writes and speaks frequently on water law and policy, including issues surrounding the Rio Grande. Her complete bio can be found at www.RobbWaterPartners.com.



Purpose of the White Paper

To gather information and provide a foundation for the further dialogues and studies needed to negotiate Minute 3XX and successor Minutes to address the challenges of more predictable and reliable water deliveries on the Rio Grande under the 1944 Treaty addressing the Rio Grande from Fort Quitman to the Gulf of Mexico.

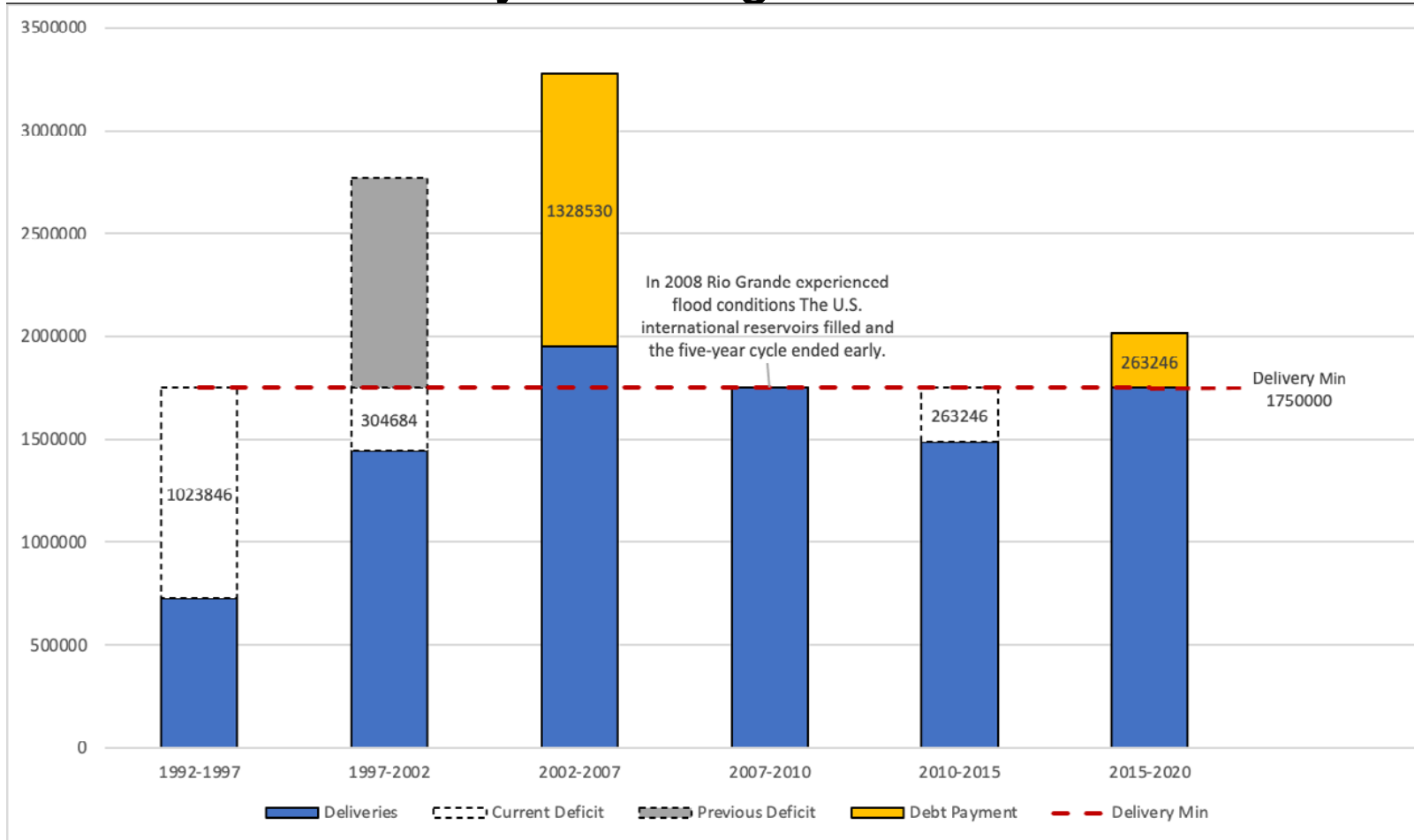


Fort Quitman to the Gulf of Mexico



Delivery Challenges

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.



Organization of the White Paper

Key sections of the White Paper:

- Background on the Rio Grande physically, operationally, and historically
- The Water Delivery Situation
- Pertinent Law under the 1944 Treaty, Selected Minutes, and Relevant U.S., Texas, and Mexico Laws
- Stakeholder Views on Challenges and Potential Solutions for More Predictable and Reliable Deliveries
- Lessons from the Colorado River Experience Minutes 319 and 323
- Potential Actions For Further Consideration to Address Challenges in Minute 3XX and Subsequent Minutes



The Heart of the White Paper: Stakeholder Interviews

The three questions:

1. What do you see as potential **challenges** to predictable and reliable water deliveries under the 1944 Treaty?
1. What can we learn from the Colorado River experience, particularly 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?



Why Agreement Can Be Possible

Stakeholders agree on these important factors:

- An agreed-upon, **defined problem**: water scarcity and delivery
- Commitment** to the goal of a Minute in 2023
- Leadership** through both Sections of the IBWC
- Almost 80 Years of **Experience** in Solving Problems under the 1944 Treaty
- The Treaty Provides **Flexibility** to Address Future Challenges
- Constantly Improving **Science**, Modeling, and Communication



Challenges the Stakeholders Identified

- Lack of trust due to delivery issues
- Differing views in the meaning of the Treaty and Minute language, between the countries and within each country
- Historic lack of consideration of environmental flows and exclusion of NGOs in dialogues
- Lack of understanding of operations on both sides
- The impact of security and unauthorized use

Lessons from the Colorado River Experience

- Building relationships was critical to reaching the agreements in Colorado River Minutes 319 and 323
- NGO involvement was a key positive factor in reaching the Minutes 319 and 323 agreements
- Multiple additional venues for interactions between the countries and among stakeholders promoted effective solutions
- Changes to water management promoted certainty and sustainability
- Expanded the supply of water in Mexico and the U.S. with programs and funding



Colorado Experience: Building Relationships

- Frequent meetings with the same individuals
- Mexico states participated
- Time
- Incremental steps
- Involvement of NGOs



Stakeholder Suggestions for Potential Actions

Each of these would require a feasibility analysis from a legal, technical and cost perspective

- Create an Environmental Work Group and consider creating additional Work Groups to address Projects, Salinity, and other topics
- Consider a Morillo Drain improvement project for the canal: With an estimate cost of \$7.8 million to attain 3 cms; it would cost \$25.8 million to attain 4cms based on 2022 cost values.
- Consider a Desalination Plant to treat Morillo Drain waters: which would recover nearly 24% of the minimum annual average delivery volume of potentially 84,000 acre-feet (103.12 mcm) which is nearly 24% of the minimum annual average delivery volume to the United States under the 1944 Treaty, with an estimated cost of \$40 million adjusted to 2022 (based on a 2016 Moro Ingenieria, S.C. study commissioned by CONAGUA). Effluent from the desalination plant would have an average water quality of 51.64 ppm of TDS, resulting in mass balance of 820.92 ppm of TDS.
- Provide for use of San Juan water under certain specified criteria
- Provide Mexico the flexibility to use six named tributaries water in the first five-year cycle, as is currently provided under Minute 234 in a second five-year cycle deficiency
- Develop management criteria for releases from the Conchos, tied to upstream dam levels
- CONAGUA consider the U.S. as a user in its system and priority user on the Rio Grande; give U.S. priority like on the Colorado River

Stakeholder Suggestions, Con't

- If Mexico agrees to annual established deliveries, provide a mechanism to credit Mexico if a storm fills the International reservoirs resulting in excess deliveries.
- A new Basin Study that includes the U.S. and Mexico
- Expand sustainable water measures through education and projects
- Encourage leaders to create a “CRWUA” for the Rio Grande
- Construct a Falcon-Matamoros Aqueduct
- Construct a Brownsville-Matamoros Weir: the project would replace the functions of the Retamal Dam. The original design had a capacity of 60,000 acre-feet. Locate a site acceptable to both countries.
- Elevate existing dams to improve capacity
- Federal funding for water conservation projects in Mexico with conserved water released to the Rio Grande to benefit Big Bend and downstream users



Questions, Reactions, Suggestions?



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