# OPPORTUNITIES TO ADAPT THE RIO GRANDE/BRAVO BASIN WATER RESOURCES ALLOCATION REGIME

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THE GREATEST OBSTACLE TO RATIONAL MANAGEMENT OF WATER STEMS FROM FAILURES OF GOVERNANCE AND LACK OF COORDINATION AMONG POLITICAL JURISDICTIONS.

URI SHAMIR AND CHARLES D. D. HOWARD, "WATER MANAGEMENT IN 2050", 2012.

THE RIO GRANDE IS DISAPPEARING. DEMAND FOR WATER IS GROWING AS AVERAGE TEMPERATURES RISE FASTER THAN THEY EVER HAVE IN THE PAST 11,000 YEARS. THE WATER THAT REMAINS IS BEING FOUGHT OVER BY THE COUNTRIES AND STATES THAT AGREED TO SHARE THE RIVER. AT THE SAME TIME, A BORDER FENCE IS BEING BUILT ALONG ITS BANKS.

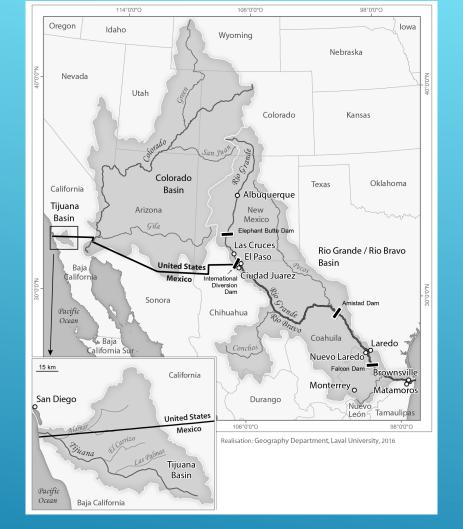
THE TEXAS TRIBUNE, DISAPPEARING RIO GRANDE, 2014.

- The United States (U.S.) and Mexico have consolidated a transboundary framework based on water sharing.
- Water of the Rio Grande/Bravo (RGB) is allocated within a binational legal framework that also sustains political boundaries between the U.S. and Mexico.
- Water supply no longer meets the ever-increasing demand for water or the expectations of different stakeholders.
- Opportunities exist for an enhanced water allocation regime.
  - Existing flexibility of the binational framework.
  - Potential to move forward with an ad hoc institutional arrangement
  - > Political will to achieve change through stakeholders recommendations.

### INTRODUCTION

- Background Information
- The Legal Instruments Shaping the Binational Institutional Framework for Water Allocation
- 3. Enhancing the RGB Water Governance Framework
- 4. <u>Binational Ability to Achieve Solutions</u>
- 5. Methods
- 6. <u>Enabling Adaptation trough Stakeholders' Insights</u>
- 7. Policy Recommendations

### CONTENT









## 1. BACKGROUND INFORMATION



- 1. Does the current binational water allocation framework meet present and future human and environmental needs?
- 2. How can the U.S.-Mexico water allocation framework be adapted to balance social and environmental water demands so it can support and preserve the RGB Basin ecosystem? and,
- 3. What are the main opportunities to be explored for expanding the U.S.-Mexico water resources allocation framework?

### Rio Grande Compact (RGC)

Scale: RGB riparian U.S. states: Colorado, NM, and Texas.

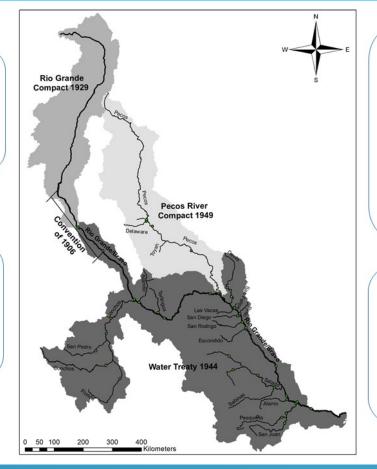
Jurisdiction: Waters of the Rio Grande above Fort Quitman, TX.

**Dominant content:** Removing all causes of present and future controversy, promotes interstate comity, and effecting an equitable apportionment of waters of the Rio Grande.

#### Convention of 1906

Scale: Binational.

Jurisdiction: The international reach of the river between the El Paso/Ciudad Juarez Valley, and Fort Quitman, Texas. Dominant content: Providing for the equitable distribution of the waters of the Rio Grande for irrigation purposes, and removing all causes of controversy between the U.S. and Mexico.



### Pecos River Compact (PRC)

Scale: PR riparian U.S. states: NM and Texas.

Jurisdiction: All of the contributing drainage area of the PR and its tributaries above its mouth near Langtry, Texas. he Pecos Dominant content: Providing for the equitable division and apportionment of the use of the waters of the Pecos River, promoting interstate comity, removing causes of present and future controversies, making secure and protect present development within the states, and facilitating the construction of works for the salvage of water, the more efficient use of water, and the protection of life and property from floods.

### 1944 Water Treaty

Scale: Binational.

Jurisdiction: Waters of the CR and the TR, and of the Rio Grande (Rio Bravo) from Fort Quitman, Texas, to the Gulf of Mexico.

Dominant content: Fixing and delimiting the rights of the two countries with respect to the waters of the Colorado and Tijuana Rivers, and of the Rio Grande (Rio Bravo) from Fort Quitman, Texas, United States of America, to the Gulf of Mexico, and obtaining the most complete and satisfactory utilization.

## 2. THE LEGAL INSTRUMENTS SHAPING THE BINATIONAL INSTITUTIONAL FRAMEWORK FOR WATER ALLOCATION



### Examples:

- ✓ The Colorado River Salinity Crisis
- ✓ Salinity in the Lower Rio Grande
- ✓ Border Sanitation
- ✓ Water Scarcity in the Colorado River Basin and Environmental Management in the Tijuana River Basin



In Mumme and Taylor, 2014

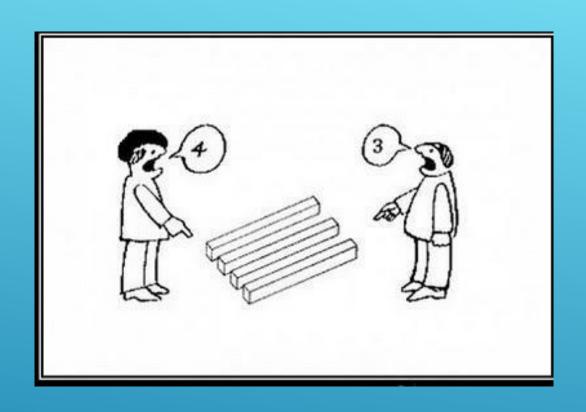
## 3. ENHANCING THE RGB WATER GOVERNANCE FRAMEWORK

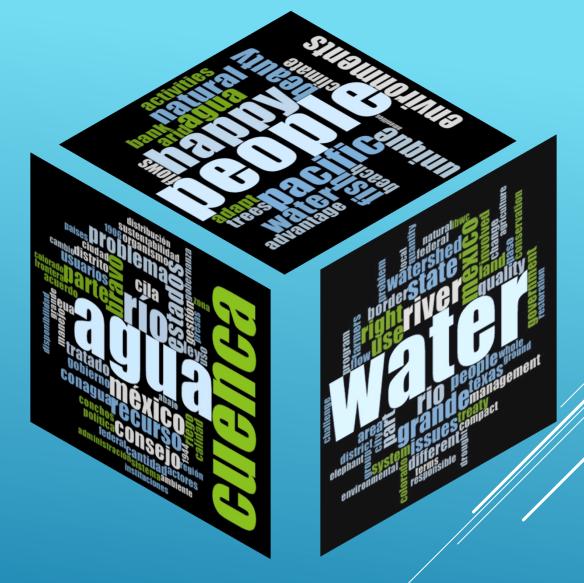
UNITED STATES AND MEXICO SIGN TREATY FOR MUTUAL USE OF RIVERS' WATERS

## 4. BINATIONAL ABILITY TO ACHIEVE SOLUTIONS



Edward Drusina signed Minute 318 related to the Colorado River.





## 5. METHODS







## 6. ENABLING ADAPTATION TROUGH STAKEHOLDERS' INSIGHTS

- To allow the movement of water from one use to another on a temporary-reciprocity basis.
- 2. To fully exploit the potential of existing technical human resources to solve water quantity and quality issues in the basin.
- 3. To put in practice sustainable solutions to solve punctual issues in a specific area.
- 4. To address new circumstances through the Minute process.

### 7. POLICY RECOMMENDATIONS



POLICY

CHANGES



DESERTS ARE NEAT PLACES BECAUSE THE PLANTS 4 AND ANIMALS THAT LIVE THERE HAVE TO BE STRONG AND UNIQUELY ADAPTED TO SURVIVE. THE PEOPLE WHO'VE LIVED HERE, NOW AND GOING BACK THOUSANDS OF YEARS, HAVE HAD TO ADAPT TO THIS ENVIRONMENT, AND IN DOING SO HAVE **DEVELOPED UNIQUE CUSTOMS AND** TECHNOLOGIES AND A PARTICULAR KIND OF **RESILIENCY.**" MEMBER OF THE SCIENTIFIC COMMUNITY

