



# **International Boundary and Water Commission**

Adriana Reséndez, Commissioner, International Boundary and Water Commission – Mexican Section  
Ramon Macias III, Principal Engineer, International Boundary and Water Commission – US Section

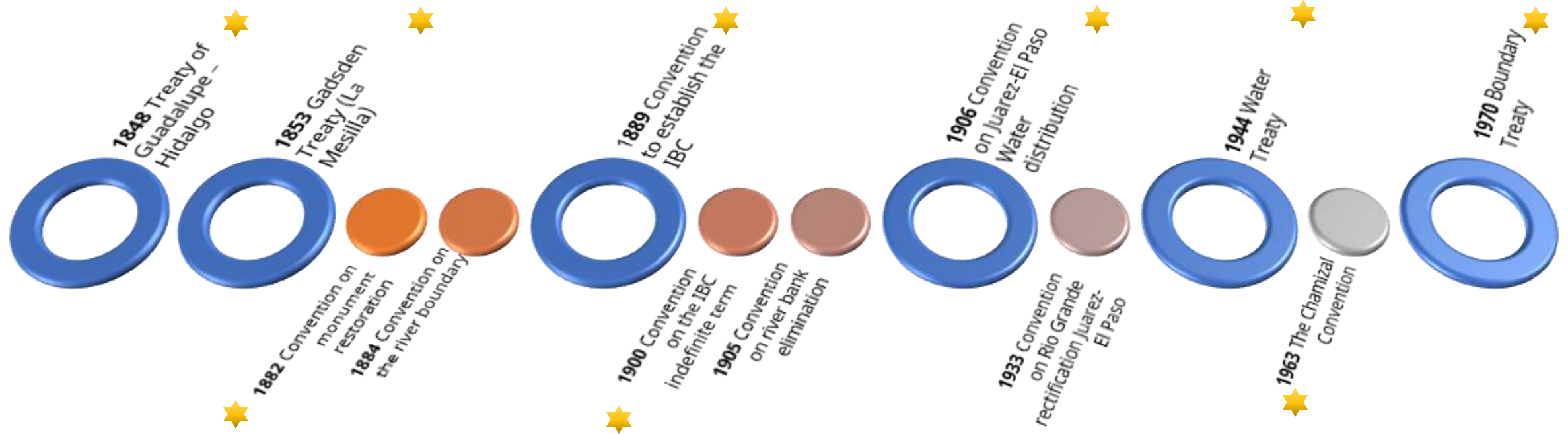
**Shared Borders, Shared Waters Conference**

**May 20, 2025**

# IBWC Historical and Legal Framework



COMISIÓN INTERNACIONAL  
DE LÍMITES Y AGUAS ENTRE  
MÉXICO Y ESTADOS UNIDOS



★ Treaties and Conventions in force



# INTERNATIONAL BOUNDARY AND WATER COMMISSION

UNITED STATES AND MEXICO

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## **Session 1: Frameworks for Collaboration Across Borders**

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***Shared Borders-Shared Waters Conference***

May 20, 2025



# INTERNATIONAL BOUNDARY AND WATER COMMISSION

## UNITED STATES SECTION



### MISSION

Provide binational solutions to issues that arise during the application of United States–Mexico treaties regarding boundary demarcation, national ownership of waters, sanitation, water quality, and flood control in the border region.

### VISION

To be recognized as the premier agency that identifies solutions along the United States – Mexico border through local, state, federal and binational partnerships.

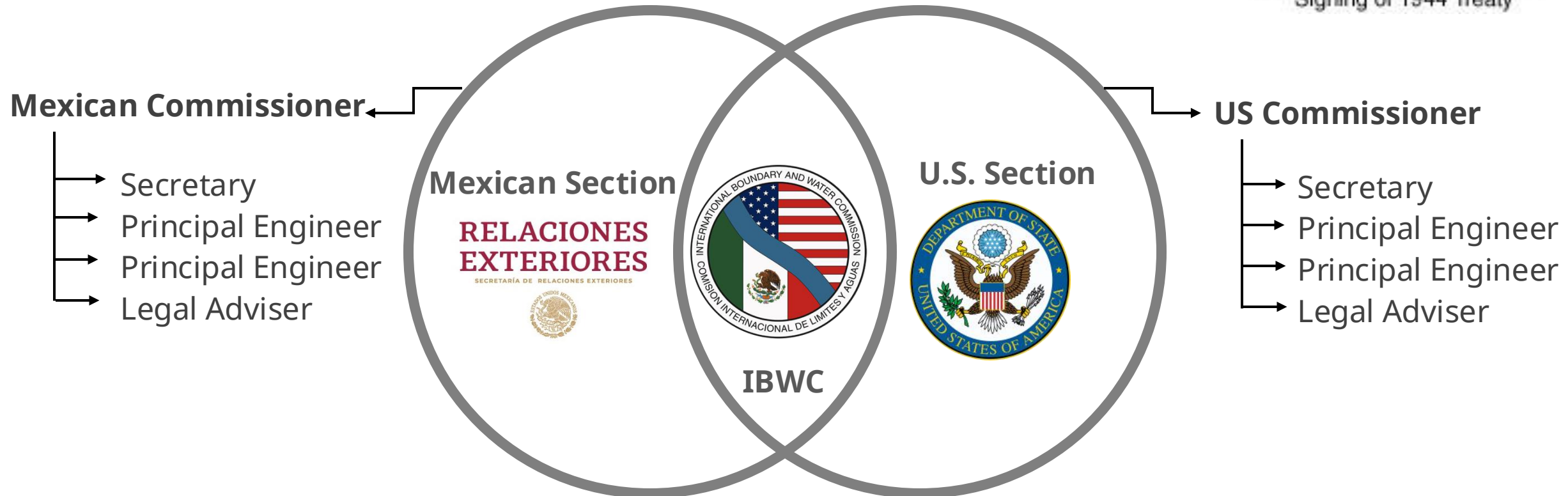


# IBWC Structure – International Organization

**1944 Water Treaty between Mexico and The United States of America** for the utilization of Waters of the Colorado and Tijuana Rivers and of the Rio Grande



Signing of 1944 Treaty







# MISSION AND GOALS OF USIBWC

## **Mission:**

- To provide binational solutions to issues regarding boundary demarcation, national ownership of waters, sanitation, water quality, and flood control in the border region that arise during the application of United States and Mexico treaties.

## **Strategic Goals :**

- Goal 1. Water Management.
- Goal 2. Water Quality Improvement.
- Goal 3. Resource and Asset Management.
- Goal 4. Manage the United States and Mexico Boundary.
- Goal 5. Leadership and Performance Excellence.



COMISIÓN INTERNACIONAL  
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# IBWC Offices



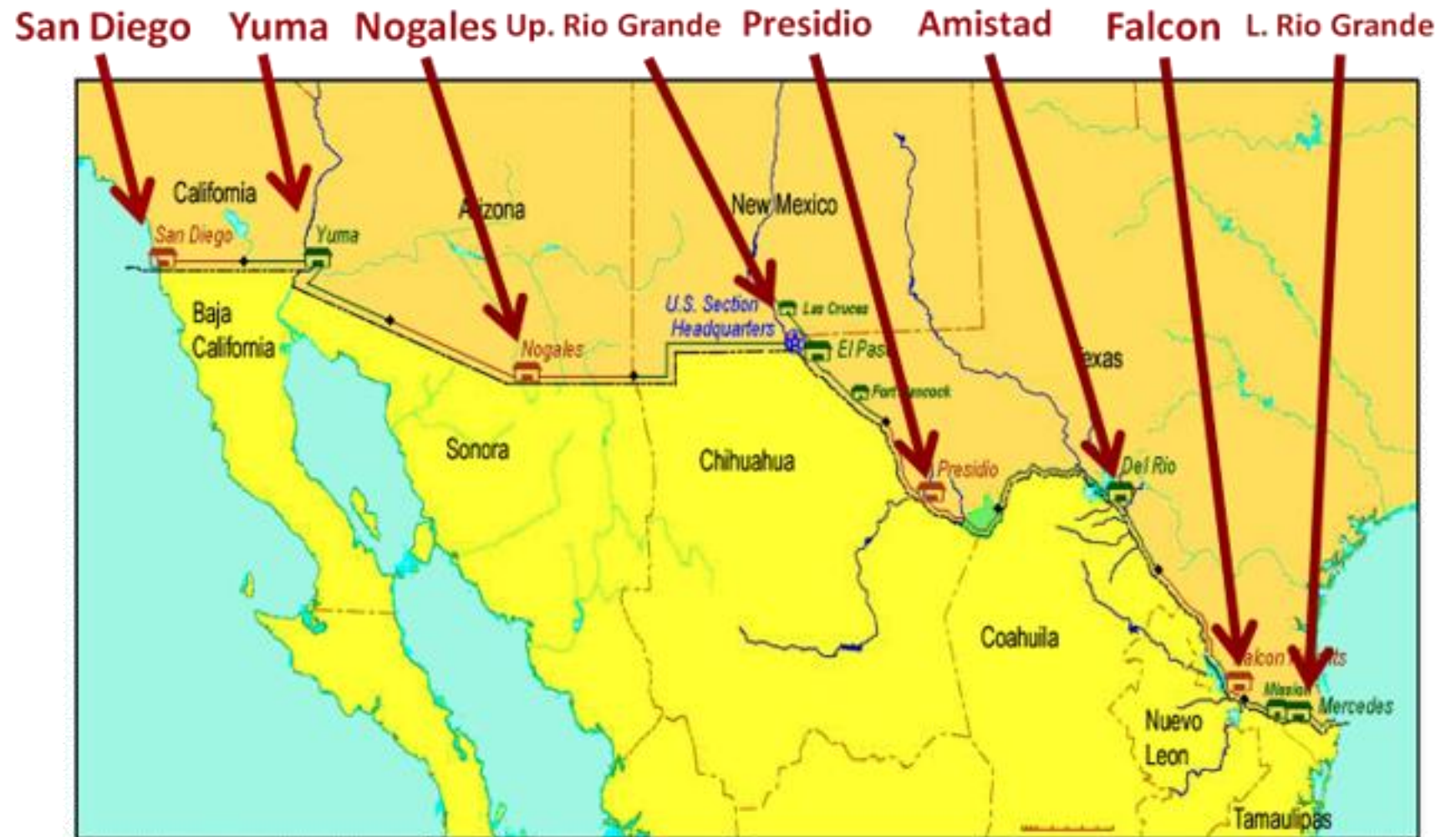
Office	Jurisdiction (kilometers)
Tijuana, B.C.	108 km
Mexicali, B.C.	340 km
Nogales, Son.	390 km
Cd. Juárez, Chih.	770 km
Cd. Acuña, Coah.	900 km
Nuevo Laredo, Tam.	167 km
Reynosa, Tam.	500 km



# COLLABORATION ACROSS BORDERS

## USIBWC FIELD OFFICES

USIBWC staffing at 12 offices in the border region and Washington D.C.







# COLLABORATION ACROSS BORDERS

- In accordance with **Article 25** of the **1944 Water Treaty**, decisions of the Commission are recorded in the form of **Minutes**.
- **Minutes** are binding agreements of the IBWC intended to implement the treaty.
- They take effect once approved by the U. S. Department of State and Mexico's Foreign Affairs Ministry.
- The IBWC have signed a total of 332 Minutes to date.
- **Minute 1** was to exchange credentials of members of both Sections of the Commission due to personnel changes, signed October 3, 1922 in El Paso, Texas.
- **Minute 332** was for the construction of a composite cutoff wall to reduce the risk of failure at Amistad International Dam signed December 10, 2025 in El Paso, Texas



# COLLABORATION ACROSS BORDERS

ACIA NUMERO UNO. Octubre 3, 1922.

MINUTE NO. 1.

En la ciudad de El Paso, Estado de Texas Estados Unidos de América a las once horas del día tres de octubre de mil novecientos veintidós en la oficina número seiscientos treinta y tres del Edificio First National Bank, tuvo verificativo una Junta de la Comisión Internacional de Límites entre los Estados Unidos Mexicanos y los Estados Unidos de América.= Debido a los cambios de personal habidos tanto en la Sección Mexicana como en la Sección Americana, fueron mostradas las credenciales de sus miembros, habiéndolas encontrado en buena y debida forma como sigue: Sección Americana: George Curry, Comisionado; Randolph E. Fishburn Ingeniero Consultor y J. Harrie Cloonan Secretario y Pagador Especial.= Sección Mexicana: Federico Ramos, Comisionado; Gustavo P. Serrano, Ingeniero Consultor; José Hernández Ojeda, Secretario; Armando Santacruz, jr., Primer Ingeniero; Guillermo Ortuño, Topógrafo; Salvador Cuéllar Muñoz, Topógrafo; Horacio G. de Partearroyo, Ayudante del Secretario y Agustín P. Carranza, Dibujante.= En seguida se levantó la sesión para ser reanudada a las trece horas del día tres de octubre de mil novecientos veintidós, en la oficina de la Sección Americana.=

*Federico Ramos*  
Comisionado Mex.

*George Curry*  
Comisionado Ame.

*José Hernández Ojeda*  
Secretario Mex.

*Armando Santacruz, jr.*  
Secretario Ame.

On October 3rd, 1922, at 11 A. M. a Joint Meeting of the International Boundary Commission, United States and Mexico, was held in the offices of the American Section, Room 633 of the First National Bank Building, City of El Paso, Texas, U. S. A.= As some changes have occurred in the personnel of the Commissions, credentials were exchanged and found in due form as follows: American Section: George Curry, Commissioner, Randolph E. Fishburn, Consulting Engineer, J. Harrie Cloonan, Secretary and Special Disbursing Officer. Mexican Section: Federico Ramos, Commissioner, Gustavo P. Serrano, Consulting Engineer, José Hernández Ojeda, Secretary, Armando Santacruz, jr., First Engineer, Guillermo Ortuño, Surveyor, Salvador Cuéllar Muñoz, Surveyor, Horacio G. de Partearroyo, Assistant Secretary and Agustín P. Carranza, Draftsman.= The Joint Commission then adjourned to meet at 1 P.M. October 3rd, 1922, in the office of the American Section.=

*Federico Ramos*  
Ame. Commissioner

*George Curry*  
Mex. Commissioner

*Armando Santacruz, jr.*  
Ame. Secretary

*José Hernández Ojeda*  
Mex. Secretary

## INTERNATIONAL BOUNDARY AND WATER COMMISSION UNITED STATES AND MEXICO

El Paso, Texas  
December 10, 2024

MINUTE NO. 332

### CONSTRUCTION OF A COMPOSITE CUTOFF WALL TO REDUCE THE RISK OF FAILURE AT AMISTAD INTERNATIONAL DAM

The Commission met at the United States Section Headquarters Office in El Paso, Texas at 3:30 p.m. on December 10, 2024 to review the conclusions and recommendations developed by the Principal Engineers based on those presented by the Technical Advisors from the United States and Mexico, regarding structural safety measures that must be implemented to reduce the risk of failure at Amistad International Dam due to the presence of sinkholes and seepage.

The Commissioners referred to Article 5 of the "United States-Mexico Treaty for Utilization of Waters of the Colorado and Tijuana Rivers and of the Rio Grande," dated February 3, 1944, which stipulates, "The cost of construction, operation and maintenance of each of the international storage dams shall be prorated between the two Governments in proportion to the capacity allotted to each country for conservation purposes in the reservoir at such dam."

The Commissioners also observed that in Resolution 2(b) of Commission Minute 210, entitled "Recommendations Regarding Construction of Amistad Dam," signed January 12, 1961, the Governments of the United States and Mexico agreed that the distribution of the cost of construction of Amistad International Dam would be made based on the proportions "...56.2 per cent to the United States and 43.8 per cent to Mexico..."

The Commissioners also referred to Commission Minute 235, entitled "Division of Operation and Maintenance Costs of Amistad Dam," signed December 3, 1969, taking note that the "Joint Report of the Principal Engineers Concerning the Division of Operation and Maintenance Costs of Amistad Dam," signed December 1, 1969, which forms an integral part of that Minute, stipulates: "Should it become necessary to perform operation, maintenance, or repair work of an extraordinary or emergency nature which, if not performed promptly might result in risk of serious damage to the project, or in increased cost of its performance, the Commission shall order those works executed which it finds advisable and shall allocate them between the two countries for their performance as soon as possible, understanding that the performance by each Government of the work allotted to it, cannot be undertaken until it has made the necessary financing arrangements therefor."





# Territorial boundaries

## International Monuments

### International Boundary Demarcation

258 Monuments  
(1882 Convention)

18 Intermediate  
monuments

442 Markers

Mexico is responsible of the maintenance of the International Monuments from 1 to 79 and 206 to 258 Monument





# IBWC main projects along the U.S.-Mexico border.







# COLLABORATION ACROSS BORDERS

International  
organization

Territorial  
boundaries

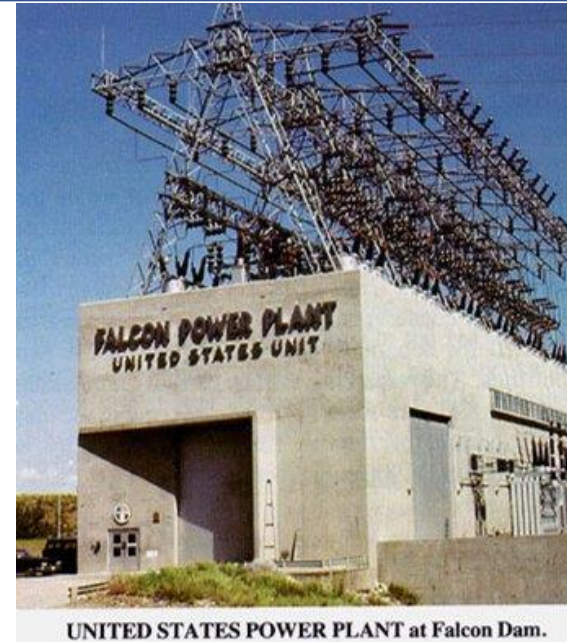
Surface  
water

Sanitation and  
water quality

Projects on international  
boundaries

IBWC is responsible for **applying the boundary and water treaties** between the United States and Mexico. The USIBWC has a broad range of responsibilities, including:

- **Flood Control:** More than 500 miles of levees and 20,000 acres of flood plain
- **Water Delivery:** Ensure compliance with the 1906 Convention and 1944 Water Treaty for the Rio Grande and Colorado River
- **Dams and Hydroelectric Power Plants:** Manage two international dams with hydroelectric plants and four diversion dams
- **Sanitation:** Border sanitation with two international wastewater treatment plants in San Diego, CA and Nogales, AZ
- **Boundary Demarcation:** Maintain two international bridges and almost 800 monuments, markers and buoys that demarcate the U.S.-MX border (US responsible for monuments in AZ: 80 to 204A).



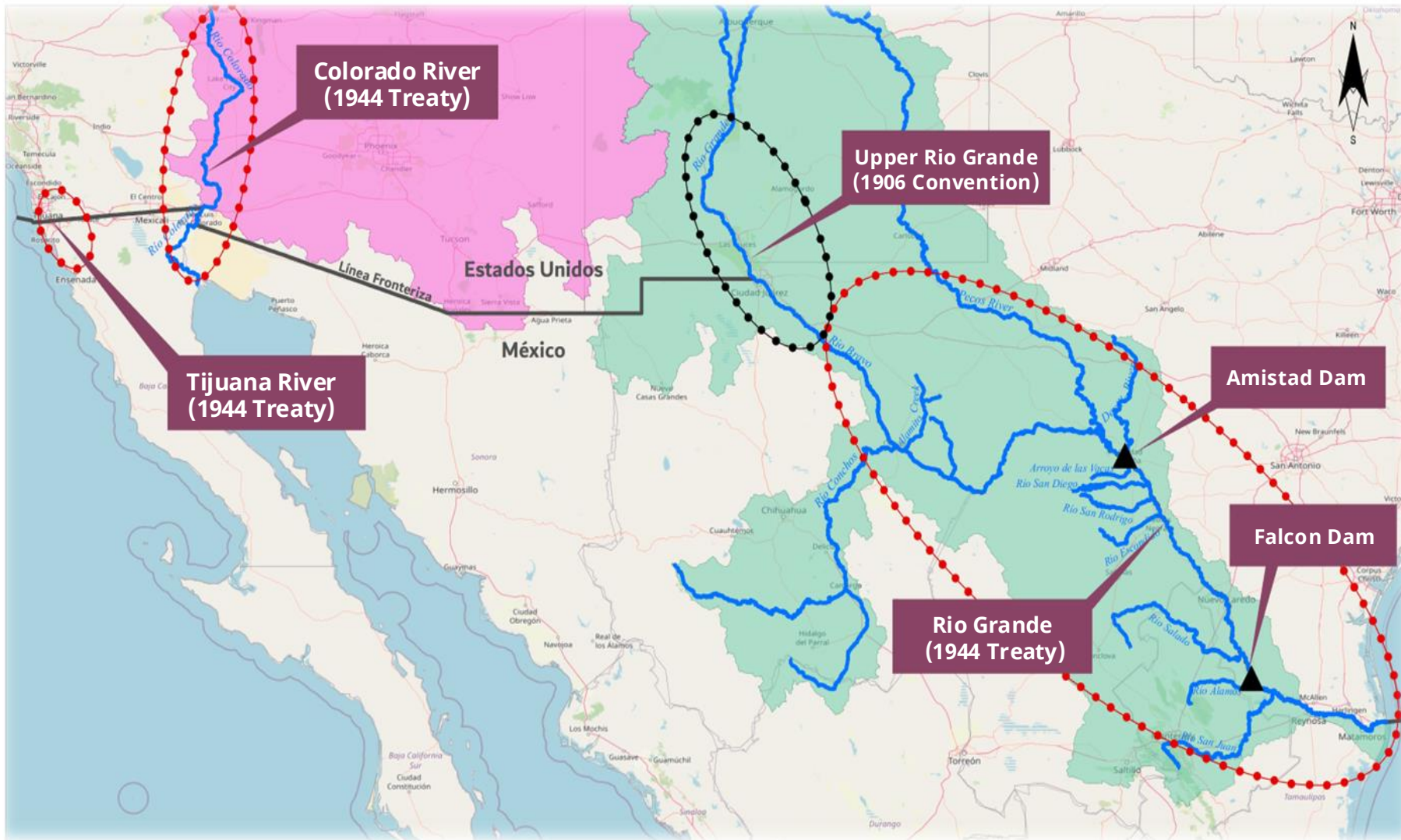


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# Collaboration Across Borders

## Surface water

### Basin Management and Water Accounting in the International Rivers



**Upper Rio  
Grande/Bravo**  
**1906 Convention**  
EUA      México  
**74 Mm3 anuales**  
**(60,000 acre-pies)**

**Rio Bravo/Grande**  
**1944 Water Treaty**  
México      EUA  
**2,158 Mm3**  
**In five years cycle**  
**(431.7 Mm3 anuales)**  
**(350,000 acre -pies)**

**Colorado River**  
**1944 Water Treaty**  
EUA      México  
**1,850 Mm3 anuales**  
**(1.5 Millones de acre pies)**





# COLLABORATION ACROSS BORDERS

## Photomap



To avoid uncertainties regarding the sovereignty over the islands and the international boundary in the watercourses, the Commission delineates the boundary on maps or aero photographic mosaics.

**Article II.C, 1970 Boundary Treaty**

## Bridges and crossings demarcation

To ensure visibility of the boundaries, the Commission carries out the demarcation of the international boundary on bridges located over international rivers and at ports of entry located at the land border.



**Article VII, 1970 Boundary Treaty**

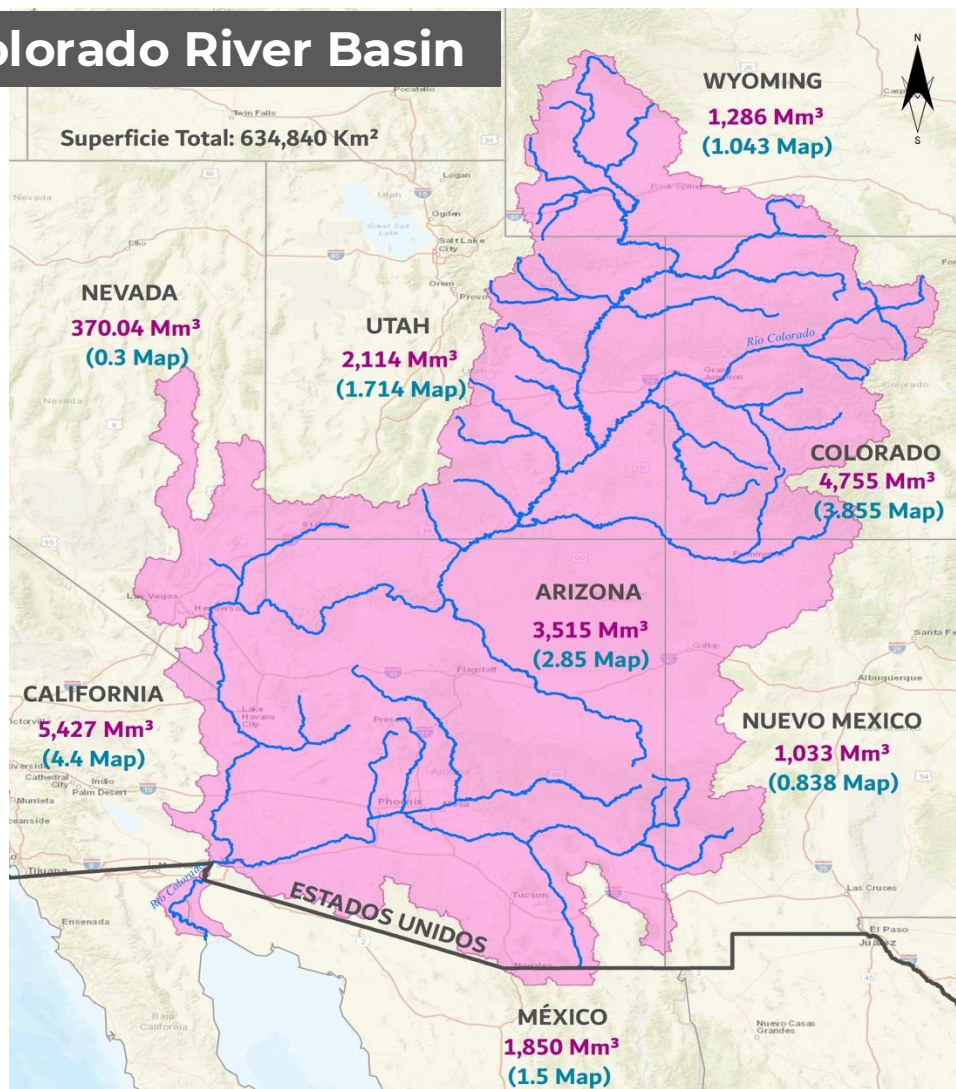
Providing binational solutions along the U.S.-Mexico Border

# 1944 International Water Treaty



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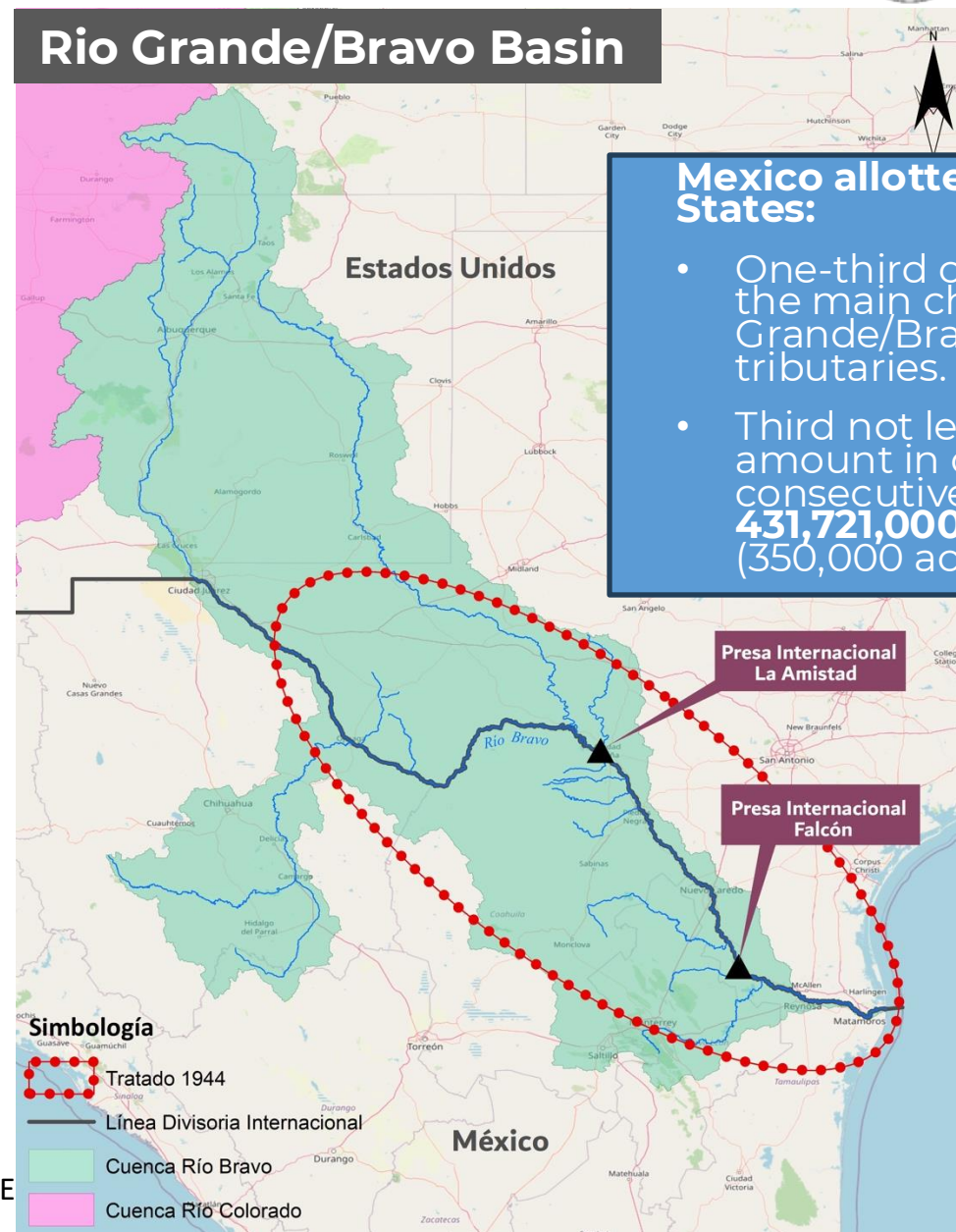
## Colorado River Basin



### The United States allottes to Mexico:

- An annual quantity of **1,850,234,000 cubic meters** (1,500,000 acre-feet) of the Waters of the Colorado River.

## Rio Grande/Bravo Basin

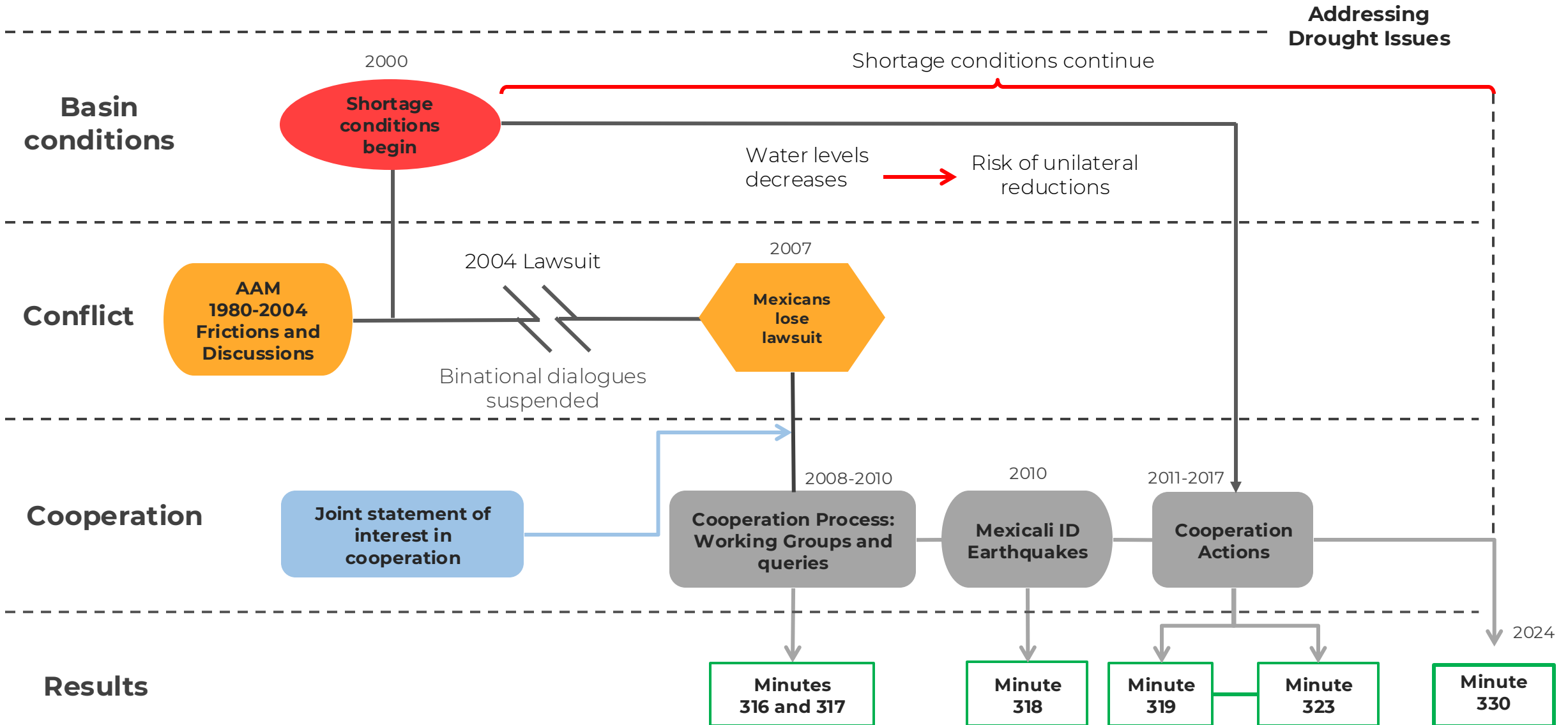


### Mexico allottes to the United States:

- One-third of the flow reaching the main channel of the Rio Grande/Bravo from 6 mexican tributaries.
- Third not less as an average amount in cycles of five consecutive years than **431,721,000 cubic meters** (350,000 acre-feet).



# Colorado River: Conflict and Cooperation



## COLORADO RIVER

### Key elements on Minute 323

DISTRIBUTION OF FLOWS UNDER HIGH ELEVATION RESERVOIR CONDITIONS	MEXICAN WATER RESERVE	ENVIRONMENT
DISTRIBUTION OF FLOWS UNDER LOW ELEVATION RESERVOIR CONDITIONS	SALINITY	INVESTMENTS AND PROJECTS
BINATIONAL WATER SCARCITY CONTINGENCY PLAN	VARIABILITY OF FLOWS ARRIVING MEXICO	ALL-AMERICAN CANAL

## RIO BRAVO/GRANDE

### Key elements on Minute 331

HYDROLOGY	ENVIRONMENT
WATER QUALITY SALINITY	PROJECTS
TOOLS FOR WATER DELIVERIES TO REDUCE DEFICIENCIES	OPERATIONS





# COLLABORATION ACROSS BORDERS

## Projects in the vicinity of international boundaries

- ✓ Crossing Service Lines
- ✓ International Ports of entry and International Bridges
- ✓ Projects in the vicinity of the land boundary.
- ✓ Flood Zone Projects

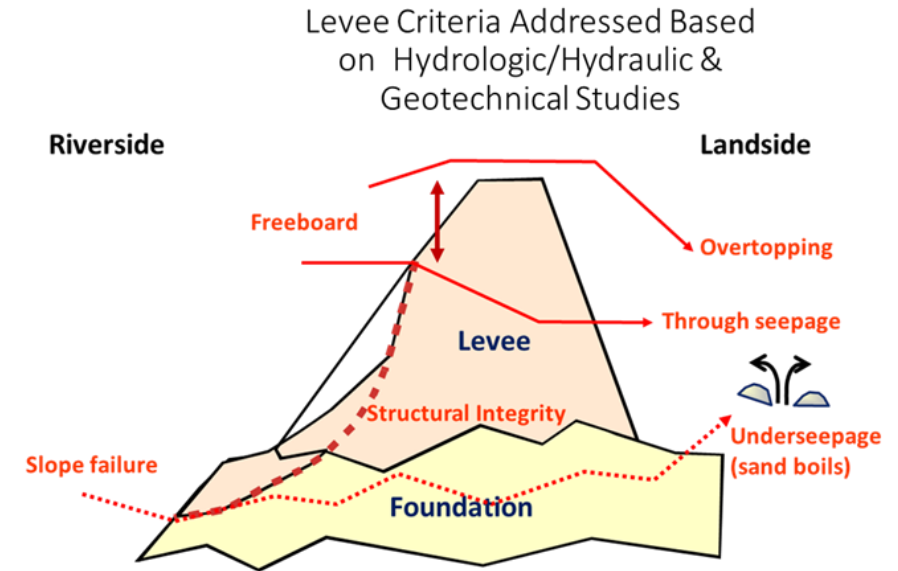




# COLLABORATION ACROSS BORDERS

## FLOOD CONTROL

- The USIBWC has rehabilitated several sections of the Upper and Lower Rio Grande Flood Control Project levees as part of our flood control mission.
- Work continues on design and construction of additional levee segments in both the URG and LRG.
- The levees are designed to result in a reduced flood risk from the design flood or the 100-year flood.
- After construction, the design and as-built construction drawings are submitted to FEMA for levee accreditation through the local municipality.



- |  |                                |
|--|--------------------------------|
| ➤ 270 river miles                        | ➤ 22 habitat restoration sites |
| ➤ 4,500 acres of river floodplains       | • (500 acres)                  |
| ➤ 210 drainage and irrigation structures | ➤ 9 gaging stations            |
| ➤ American Dam and International Dam     | ➤ American Canal               |
|  | ➤ 2 International Bridges      |







# International Dams





## 22





# Border Sanitation

## International Wastewater Treatment Plants (IWWTPs) :



### Tijuana-San Diego IWWTP:

- Constructed in accordance to IBWC Minute Num. 283
- Capacity: 1,100 l/s. (100% for MX).
- Total O&M shared cost (Ene-Sep24): **\$1.96 millions of dollars.**

### Ambos Nogales IWWTP :

- O&M in accordance to IBWC Minute Num. 206
- Capacity: 645 l/s. (434 l/s for MX)
- Total O&M shared cost (jul23-jun24): **\$1.278 millions of dollars.**

### Nuevo Laredo IWWTP:

- Constructed in accordance to IBWC Minute Num. 279
- Capacity: 1,360 l/s. (100% for MX)
- Total O&M shared cost (Jan - Sep24): **\$0.997 millions of dollars.**

**Article 3 of the 1944 Water Treaty: "...the two Governments hereby agree to give preferential attention to the solution of all the border sanitation problems."**





# COLLABORATION ACROSS BORDERS

## BORDER SANITATION







**COMISIÓN INTERNACIONAL DE LÍMITES Y AGUAS  
ENTRE MÉXICO Y ESTADOS UNIDOS**

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