International Boundary and Water Commission
United States Section

For immediate release
November 28, 2023

USIBWC Lower Rio Grande Citizens Forum Public Meeting in Mercedes on December 5

The United States Section of the International Boundary and Water Commission (USIBWC) Lower Rio Grande Citizens Forum board is pleased to announce that it will host an in-person and virtual public meeting on Tuesday, **December 5, from 3– 5 p.m. CST**.

USIBWC Commissioner Dr. Maria-Elena Giner, P.E., will give an update on the status of the Minute negotiations to bring reliability and predictability to water deliveries in the Rio Grande Basin.

Isela Canava, Principal Engineer, USIBWC Operations Department, will provide an overview of the infrastructure the agency owns and operates and its activities along the Rio Grande, from the El Paso area to the Brownsville area. The presentation will highlight international and diversion dams, water accounting activities, and how the USIBWC is advancing through science.

The Rio Grande Hydrology Work Group is developing a binational model to simulate allocation procedures and water distribution in the United States and Mexico. Delbert Humberson will lay out the model that will be used to analyze the effects of proposed water management scenarios in comparison to practices that are currently in effect.

The meeting will be held in person at:

USIBWC Mercedes Field Office
325 Golf Course Road
Mercedes, TX 78570

The public meeting will also be held virtually. Click here to join the meeting. If possible, it may be helpful for you to test connectivity on your own prior to the meeting by clicking on the "Join" link and ensuring your camera and microphone are functioning. Or join by phone: Call-in number +1 (872) 240-1286 | Conference ID: 287846474#

For those connecting via phone, the presentations will be available before the start of the meeting. Go to the Lower Rio Grande Citizens Forum page https://bit.ly/3MVCpyV and look for the links for the 12/05/2023 meeting, or use the QR Code below.

If you would like to speak during the public comment period, please sign up ahead of time by contacting Leslie Grijalva at leslie.grijalva@ibwc.gov or 915-832-4770 by noon on December 4, 2023.

News Media Contact:
Leslie Grijalva
leslie.grijalva@ibwc.gov
915-832-4770

LOWER RIO GRANDE CITIZENS FORUM

Tuesday, December 5, 2023, 3–5 p.m. CST
IBWC Mercedes Field Office
325 Golf Course Road Mercedes, TX 78570

Agenda

- **Welcome and Introductions** – Leslie Grijalva, Public Affairs Specialist, USIBWC
- **Stakeholder Update on Minute Negotiations to Bring Reliability and Predictability to Rio Grande Deliveries** - Dr. Maria-Elena Giner, P.E., Commissioner, USIBWC
- **Overview of Operations and Maintenance Activities along the Rio Grande** - Isela Canava, Principal Engineer, Operations Department, USIBWC
- **Using RiverWare to Explore Binational Basin Management Scenarios** - Delbert Humberson, Hydrologist, USIBWC
- **Public Comment**
- **Board Discussion and Formal Vote on a Co-Chair**
- **Suggested Future Agenda Items**

If you have a disability that you wish to self-identify confidentially that requires accommodation, please advise us ahead of time. For more information call 915-832-4770 or email leslie.grijalva@ibwc.gov.

Microsoft Teams meeting

Join on your computer, mobile app or room device: Click here to join the meeting

Meeting ID: 218 323 058 289
Passcode: xZpgZ7

Or call in (audio only)

+1 872-240-1286,845363299# United States, Chicago

Phone Conference ID: 845 363 299#

LOWER RIO GRANDE CITIZENS FORUM

OVERVIEW OF OPERATIONS AND MAINTENANCE ACITVITIES ALONG THE RIO GRANDE

ISELA CANAVA
PRINCIPAL ENGINEER
OPERATIONS DEPARTMENT

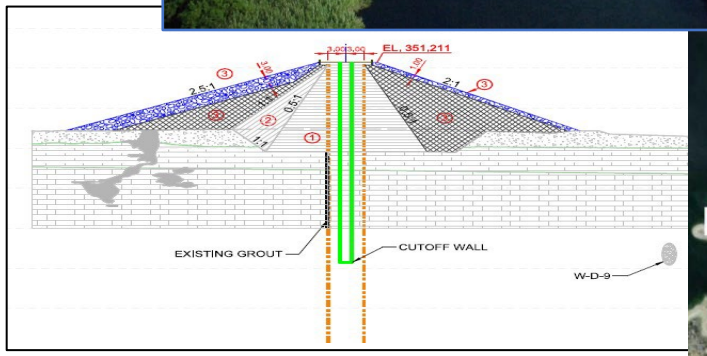
December 5, 2023

INTERNATIONAL DAMS

(Amistad, Falcon, Anzalduas and Retamal)

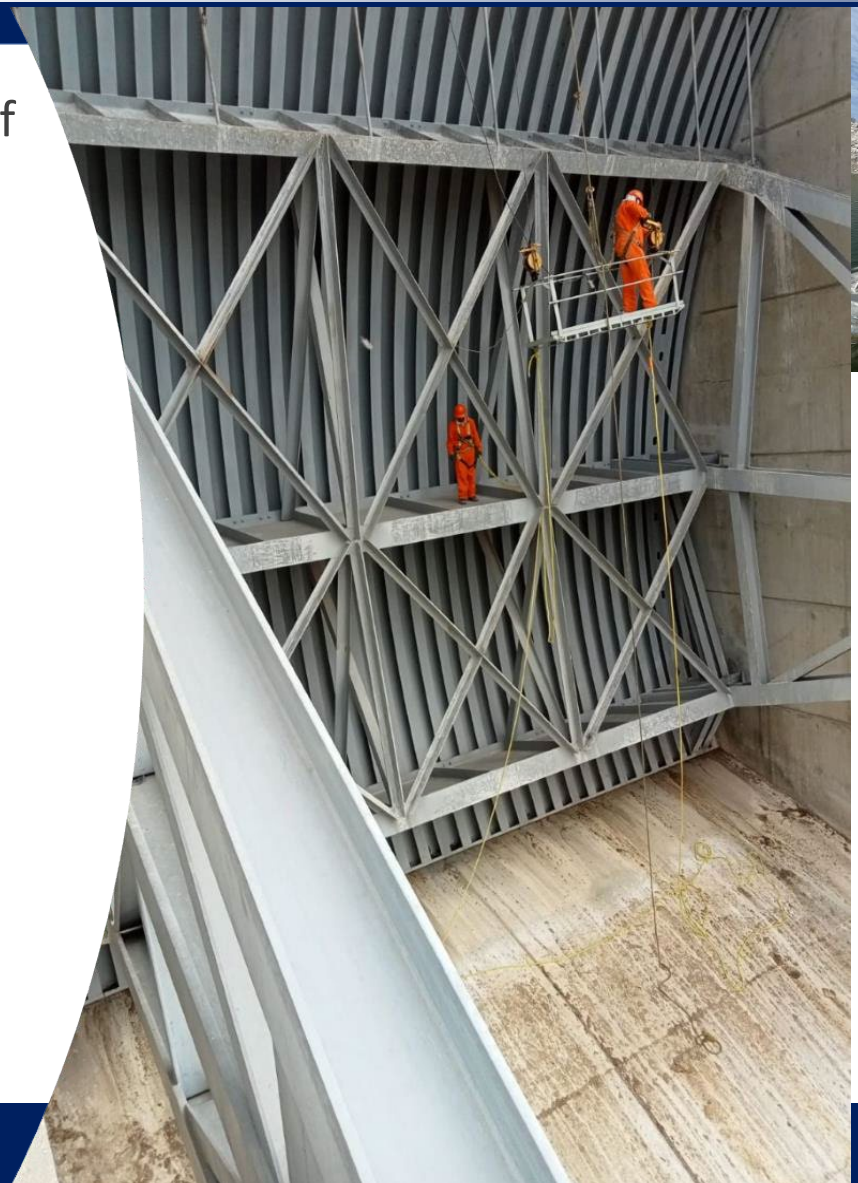
Amistad Dam

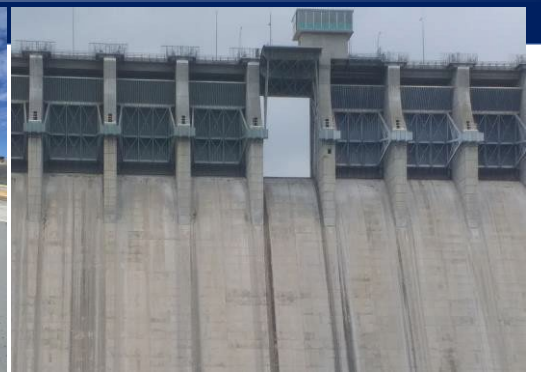
- Construction completed in 1969
- Located north of the cities of Del Rio, Texas/Ciudad de Acuña, Coahuila
- Purpose: Reservoir storage, flood control, power generation, drinking water, agriculture, and recreation.
- Problem: Formation of sinkholes in the dam basin and seepage through the foundation of the karstic limestone endangers dam
- Proposed Solution: Composite Cutoff Wall



Routine Amistad Dam Maintenance

- Inspection and maintenance of Power Plants instrumentation
- Building(s) inspection and maintenance
- Road and vegetation maintenance
- Galleries and weir inspection and
- maintenance
- Catwalk inspection and maintenance
- 28 Buoys inspection and maintenance
- Routine maintenance on Penstock(s)





Falcon Dam

- Construction completed in 1954
- Located at Falcon Heights, TX – Nueva Cd. Guerrero, Coah.
- Purpose: Reservoir storage, flood control, power generation, drinking water, agriculture, and recreation.
- Problem: Concerns with spillway
- Proposed Solution: Geophysical study completed. Geotechnical study to follow.

Routine Falcon Dam Maintenance

- Monthly dam instrumentation readings
- Vegetation control on dam embankment
- Vegetation control on dam spillway chute
- Seepage and weir maintenance
- Dam Crest Road Maintenance
- Spillway Gate Maintenance
- Bridge Inspection (TxDOT)

Anzalduas Dam

- Built in 1960
- Purpose: Flood control, diversion and water supply
- Problem: Operation of the control panel and components difficult to locate in the market. Size of dam crest impact crane operations.
- Solution: Replacement of the control panel and additional attachments, as well as pipes and electrical wiring done jointly. Equipment and material sought both in the U.S. and Mexico.

Anzalduas Dam Annual Gate Maintenance


Stoplog Installation


Painting of Gates


Wooden Seals Install


Gate Wingwall Repair

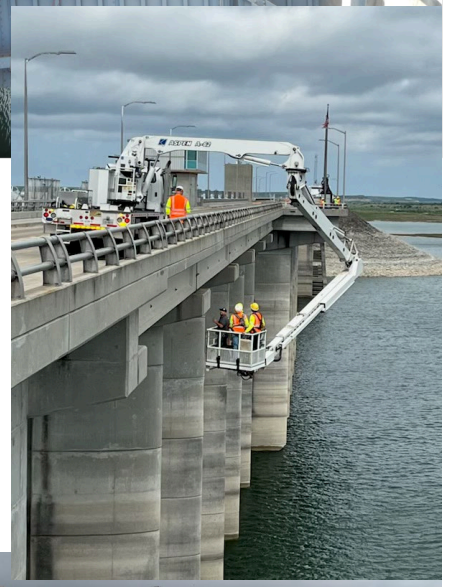
Annual Gate Maintenance

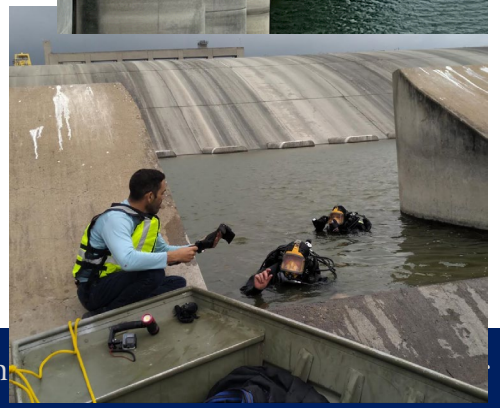
1. Normally 2 gates per year. Current contract is for 4 gates
2. Stoplog Installation is done prior to work commencing.
3. Sandblasting of Gate for removal of rust on gate.
4. Priming and Painting of Gates.
5. New wooden seals are installed
6. Refurbishing of gate wingwalls currently ongoing.

Retamal Dam

- Built in 1973
- Purpose: Flood control and diversion dam
- Problem: Oscillation of the central gate that puts the stability and safety of the structure at risk.
- Proposed Solution: Replacement of the lifting mechanisms and control panel, as well as other additional works for the safety of the dam.

Safety of Dam Inspections





Binational Inspection of Dams scheduled every 5 years

- Participation by US and Mexico Sections, Conagua, and USACE

In 2022 and 2023, Binational Inspection of Diversion Dams Conducted

- Anzalduas Bridge Structure and Gate Inspection – Performed on 10/3/2022
- Retamal Gate Inspection – Performed on 10/4/2022
- Gate Operability & Capability Inspection (GOCI) for Anzalduas and Retamal completed – 01/30/23 through 02/03/23

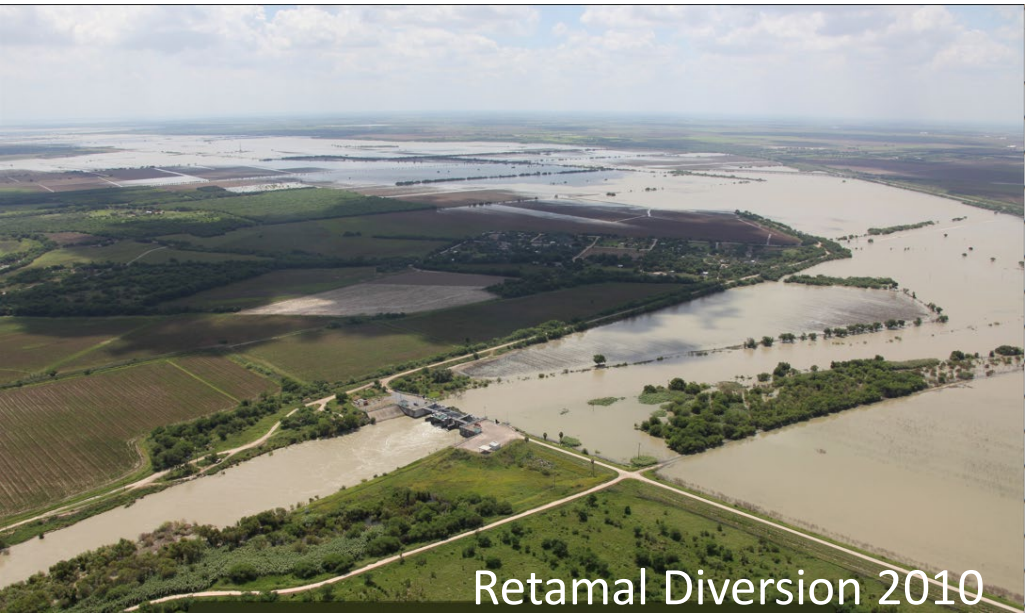
US Section performing detailed inspections with USACE on International Dams

- December 4 - 9: Falcon Dam Bridge, spillway gates, and stop log inspections
- December 11-16: Amistad Spillway and penstock gates inspections

Binational Inspections of Amistad and Falcon Dam scheduled for January – February 2024

Supplemental inspections

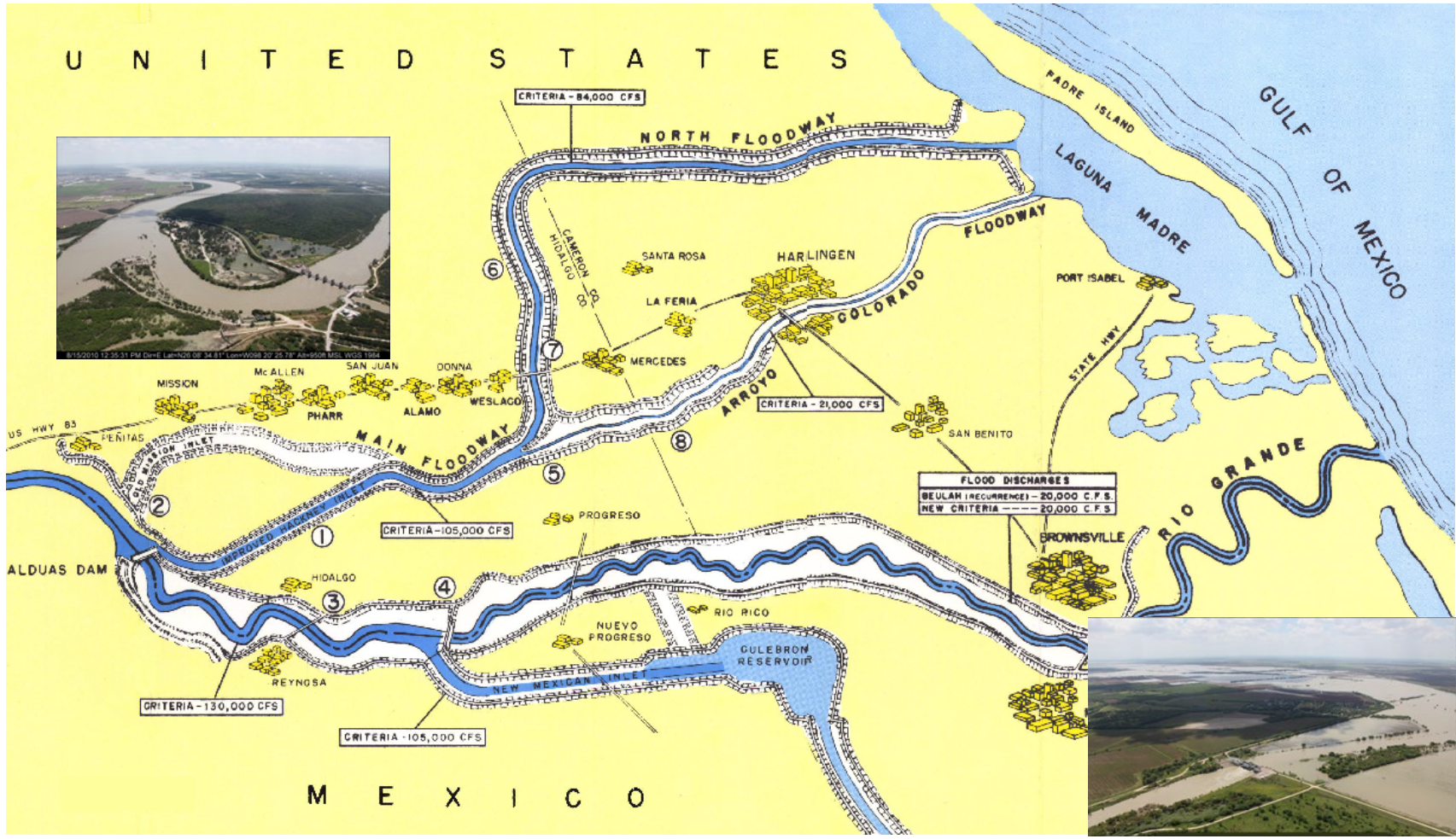
- Underwater inspection completed by US Bureau of Reclamation for Falcon and Amistad in May and November 2023.
- Amistad Bridge Inspection conducted in May 2023



Flood Control Projects/Flood Operations

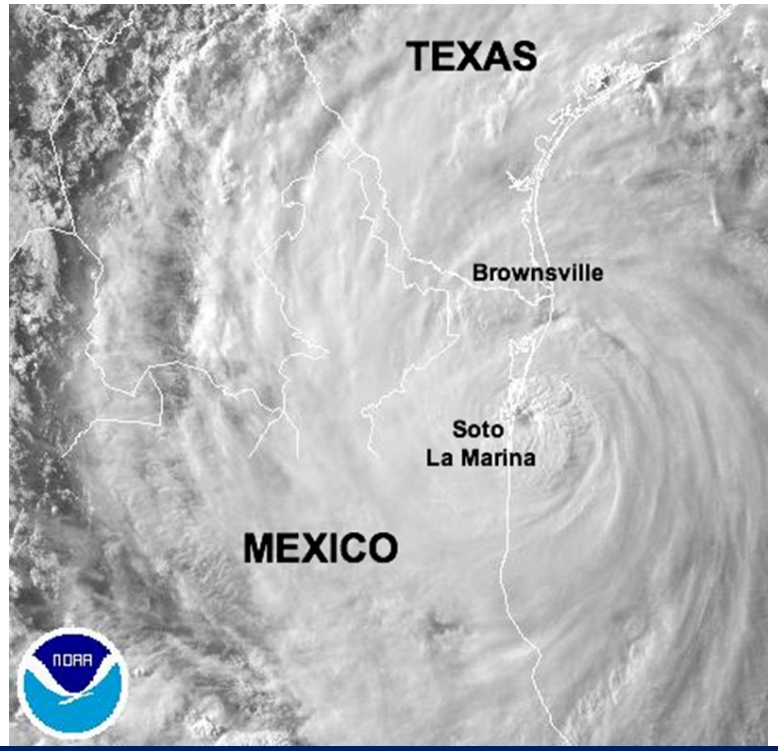
Lower Rio Grande Flood Control Project

- Project Design - 250 kcfs
- Anzalduas Dam – diverts 105 kcfs into the U.S. Floodway
  - U.S. floodway splits
    - North Floodway - 84 kcfs
    - Arroyo Colorado – 21 kcfs
- Retamal Dam – diverts 105 kcfs into the Mexican Floodway
- Allow 20 kcfs to go down the mainstem of the Rio Grande below Retamal Dam



Flood Operations in the Rio Grande

- USIBWC collaborates with numerous stakeholders in flood preparation and O&M activities
  - Mexican Section of the IBWC
  - National Weather Service/West Gulf River Forecast Center
  - USGS
  - USACE
  - CONAGUA
  - State of Texas EOC
  - TCEQ
  - Irrigation Districts
  - Political Officials
  - CBP
  - CISA

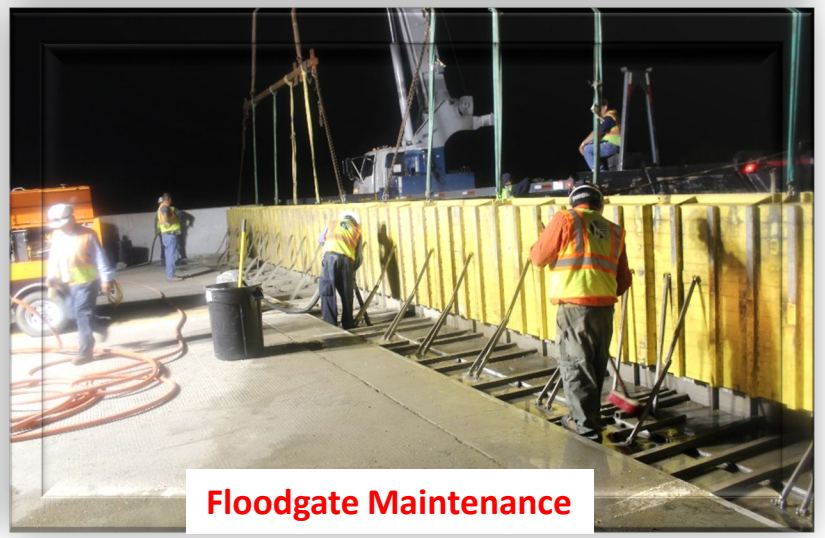


Hurricane Alex Landfall

Falcon release during 2010 Flood Event

LRGFCP Annual Maintenance

- Mowing - responsible for mowing ~12,000 acres of levee and floodway.
- Desilting - responsible for ~80 miles of pilot channel desilting
- Levee Grading and Resurfacing – 10 miles of levee resurfacing per year (MOA with Border Patrol)
- Floodgate Maintenance – 10 gates maintained per year

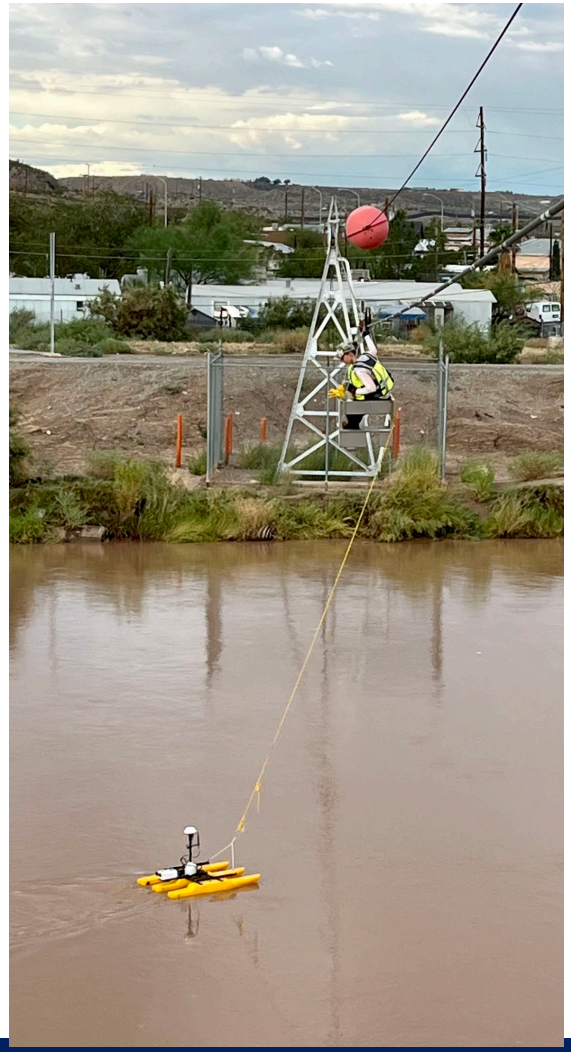


Water Accounting

Water Accounting

The Commission has established the methodology for accounting the waters of the Rio Grande, in accordance with Article 4 of the 1944 International Water Treaty, in order to keep control over the water ownership of the Amistad, Falcon and Anzalduas international dams

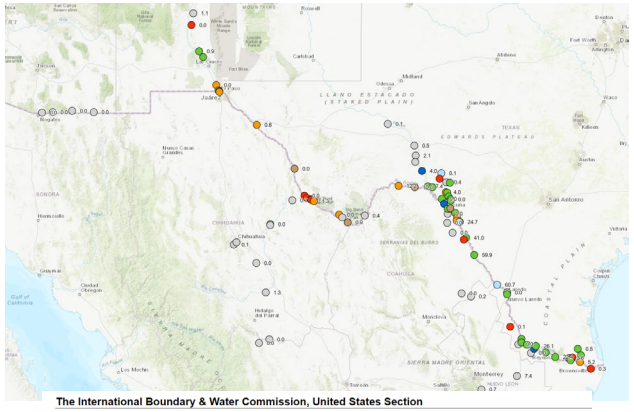
- Preliminary accounting of the Rio Grande.
- Final monthly accounting of the water of the Rio Grande.
- Daily accounting of Anzalduas

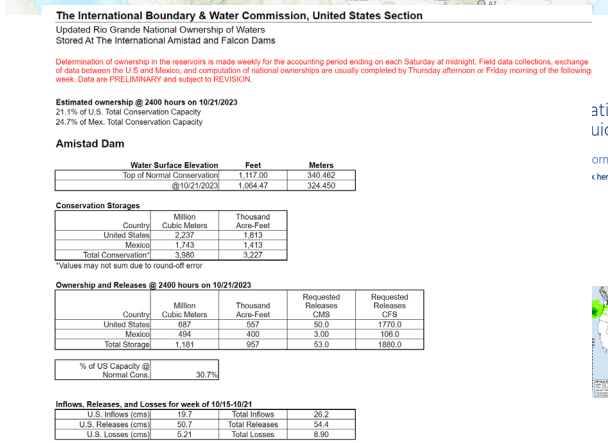


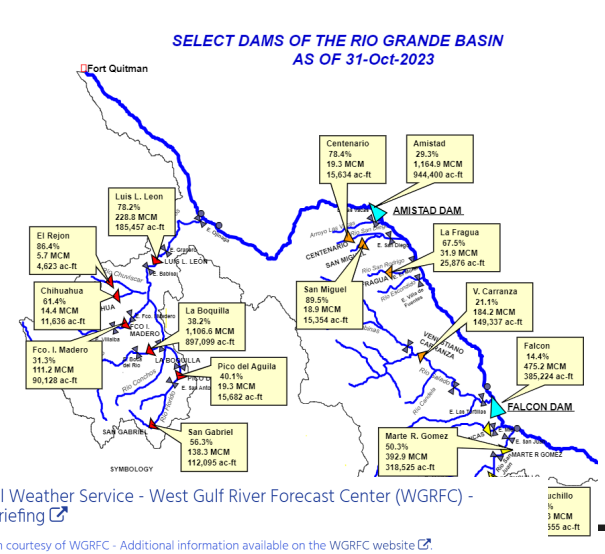
USIBWC Web Page and Web Portal

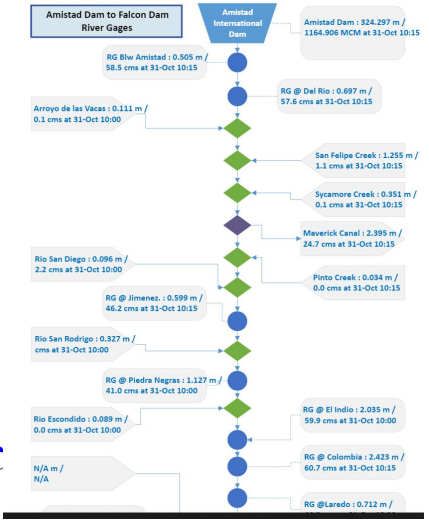
- Near real-time information
  - IBWC Reports
  - IBWC stream gage data
  - Basin reservoir information
  - NWS/WGRFC products
- Accessible by the public
  - USIBWC reports
  - Monitor basin events
  - Download time-series data

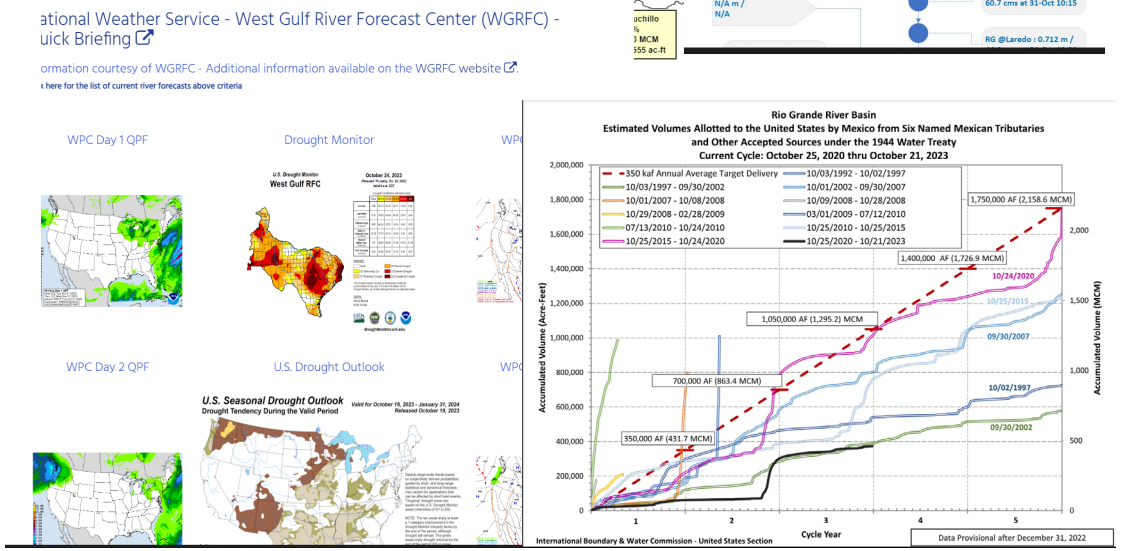
https://www.ibwc.gov/
https://waterdata.ibwc.gov/AQWebportal/











Status of Rio Grande Reservoirs

Status of Storage in International Reservoirs as of November 25, 2023

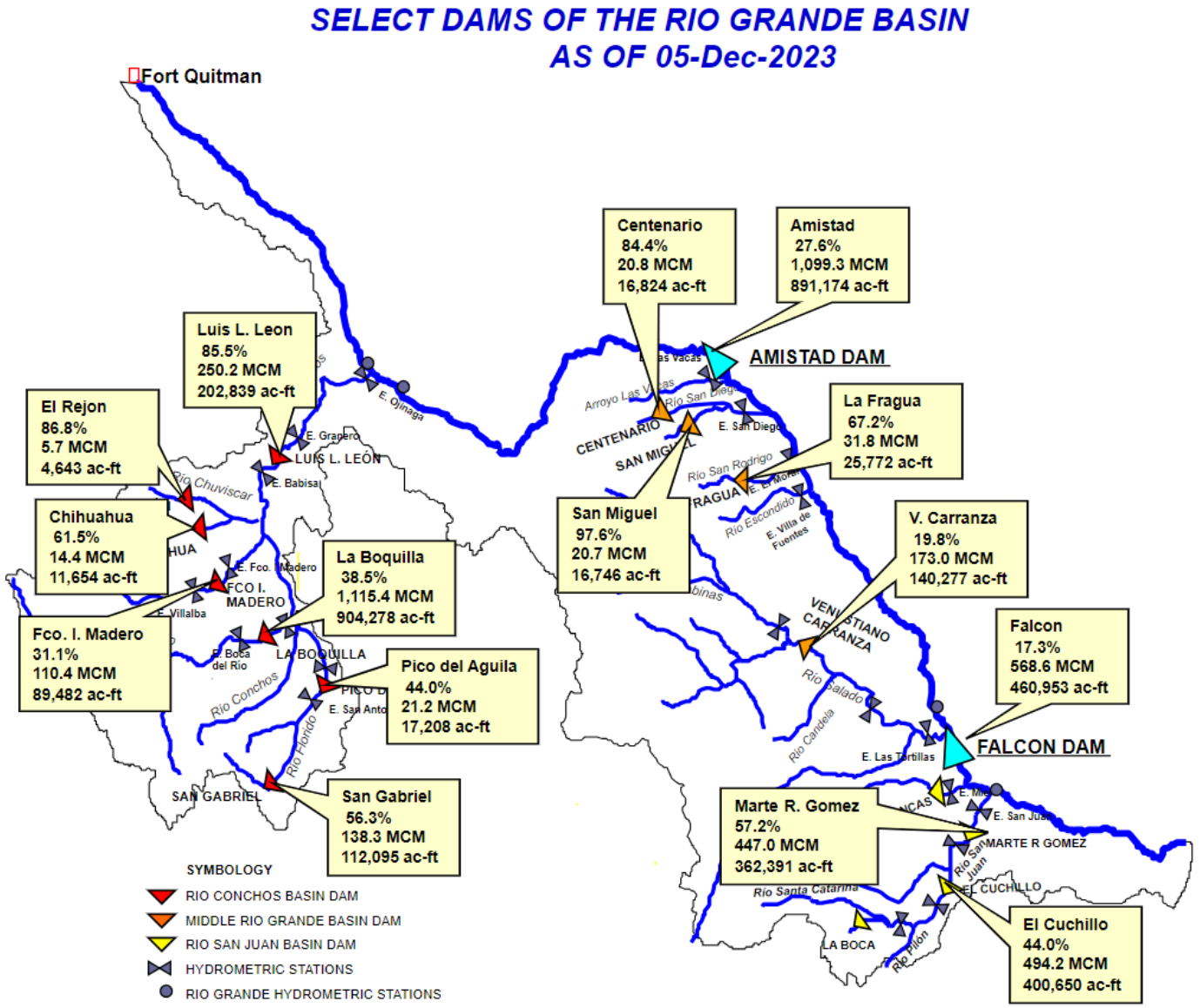
U.S. Storage

	%cap	TCM	Acre-Ft
Amistad	26.9%	602,000	488,000
Falcon	15.0%	289,000	234,000
Total	21.4%	891,000	722,000

Mx. Storage

	%cap	TCM	Acre-Ft
Amistad	28.8%	502,000	407,000
Falcon	19.2%	261,000	212,000
Total	24.6%	763,000	619,000

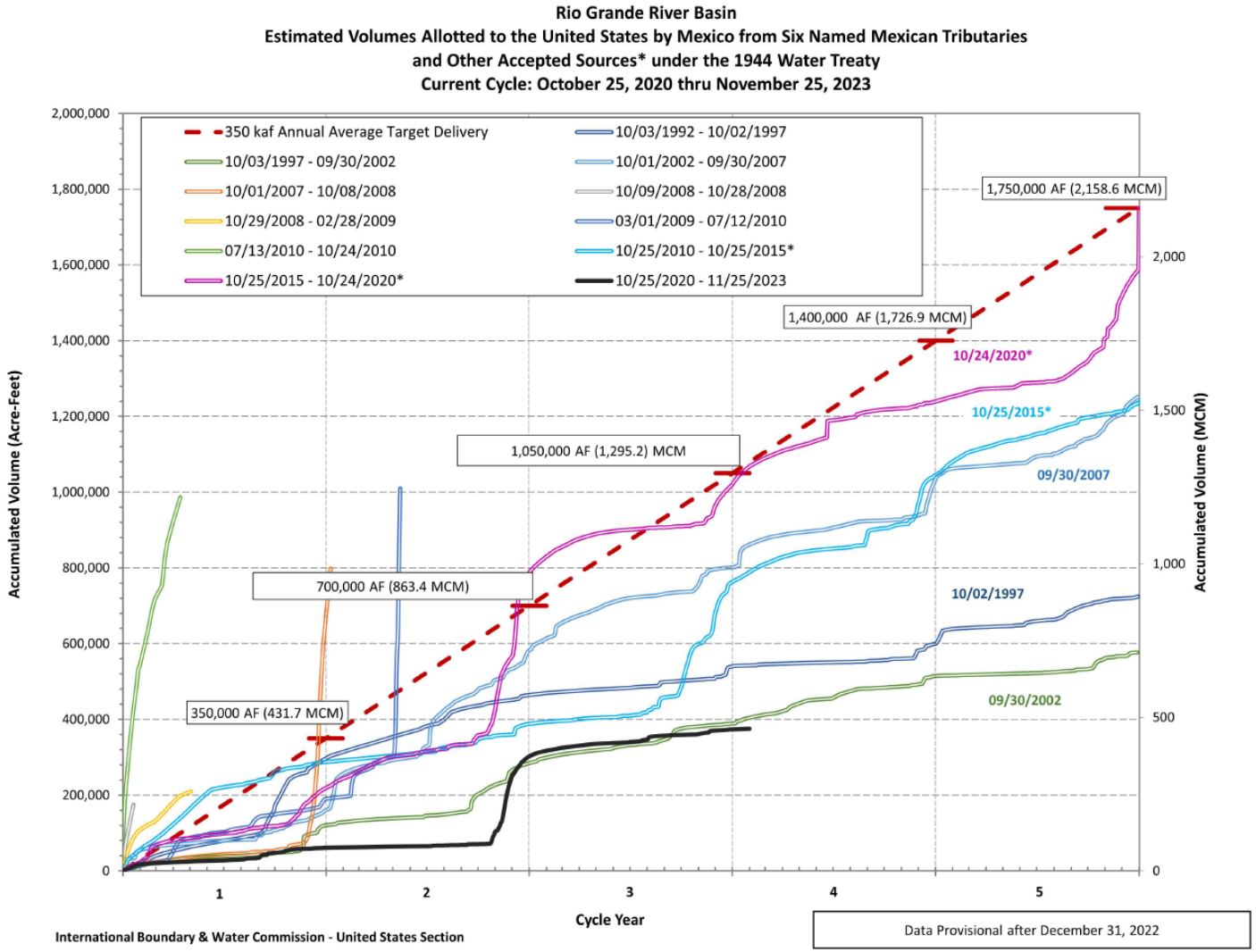
https://waterdata.ibwc.gov/AQWebportal/Data/Dashboard/19



Status of 5yr Cycle Deliveries

Year	Start Date	End Date	1/3 Tributary Flow Allotted to the United States	
			TCM	AF*
1	10/25/2020	10/24/2021	75,441	61,161
2	10/25/2021	10/24/2022	296,365	240,266
3	10/25/2022	10/24/2023	89,147	72,272
4	10/25/2023	10/24/2024	2,192	1,777
5			0	0
Total			463,145	375,476

Current Seasonal 5-Year Cycle Delivery Status:
375,476 AF (463 MCM) as of November 25, 2023
-704,815 AF (-869 MCM) below seasonal curve
34.7% of expected minimum delivery



Advancing Through Science

Rio Grande Work Groups

Rio Grande Hydrology Work Group

- Established by Minute 325 which required the Commission to establish a Rio Grande Hydrology Work Group with technical experts from both countries.
- Purpose is to enhance information exchange, develop **a binational Rio Grande model, and use the model to analyze water management scenarios.**
- Meet monthly to jointly develop a model with the goal **"…to improve the predictability and reliability of Rio Grande water deliveries to users in the United States and Mexico…."**

Lower Rio Grande Water Quality Initiative

- Compile and review existing data on the occurrence and **sources of salinity, as total dissolved solids (TDS), in the Rio Grande below Falcon Dam to the Gulf,** and develop evidence-based inferences about salinity.
- Study will **identify point sources, irrigation return flows, nonpoint sources, and any other sources** of TDS impacting the Lower Rio Grande.
- Kick off meeting was held on August 29, 2023.
- Analysis of data is underway and project will be completed in Feb of 2025.

Questions

https://www.ibwc.gov/

https://waterdata.ibwc.gov/AQWebportal/

Using RiverWare to Explore Binational Basin Management Scenarios

IBWC CONAGUA DOI TCEQ

2023 Lower Rio Grande Citizens Forum

Mission

The International Boundary and Water Commission, United States and Mexico, is responsible for applying the boundary and water treaties between the two countries and settling differences that arise in their application.

1944 Water Treaty

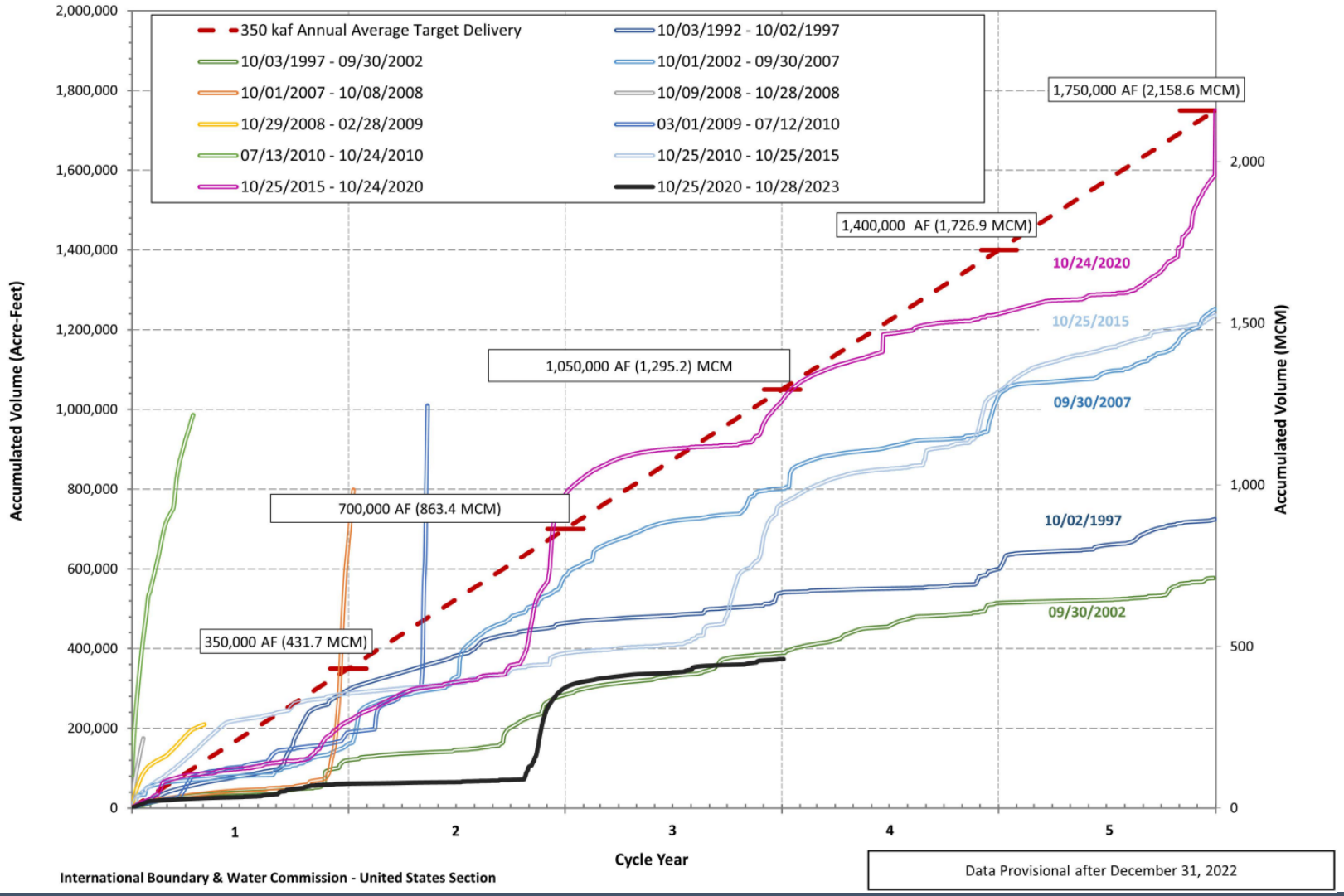
Article 4

Ft. Quitman, TX – Gulf of Mexico

1944 Water Treaty – Rio Grande Summary

- Mexico delivers water to the U.S. from Ft. Quitman to the Gulf of Mexico.
  - U.S. Receives 1/3 of the discharge from six Mexican tributaries named in the treaty.
  - This 1/3 shall not be less, as an average amount in cycles of 5 consecutive years, than 350,000 acre-feet annually.
  - Current cycle ends in October 2025.
- In the event of extraordinary drought or serious accident, Mexico may make up any deficit in the next 5-year cycle.
- The 5-year cycle ends early if U.S. Conservation capacity fills at both dams.

Rio Grande River Basin
Estimated Volumes Allotted to the United States by Mexico from Six Named Mexican Tributaries and Other Accepted Sources under the 1944 Water Treaty
Current Cycle: October 25, 2020 thru October 28, 2023



International Boundary & Water Commission - United States Section

Data Provisional after December 31, 2022

Minute 325

The Commission met at 10:00 a.m. on October 21, 2020 in Ciudad Juarez, Chihuahua near International Monument No. 1 to consider measures to end the current Rio Grande water delivery cycle without a shortfall, to improve the predictability and reliability of Rio Grande water deliveries to users in the United States and Mexico, and to permit the adoption of measures that may supply the municipal water needs of Mexican communities located along the Rio Grande downstream from Amistad International Dam in the event of an emergency.

Jayne Harkins
U.S. Commissioner

Humberto Marengo Mogollón
Mexican Commissioner

Sally E. Spener
U.S. Section Secretary

José de Jesús Luévano Grano
Mexican Section Secretary

INTERNATIONAL BOUNDARY AND WATER COMMISSION
COMISION INTERNACIONAL DE LIMITES Y AGUAS

“…to improve the predictability and reliability of Rio Grande water deliveries to users in the United States and Mexico….”

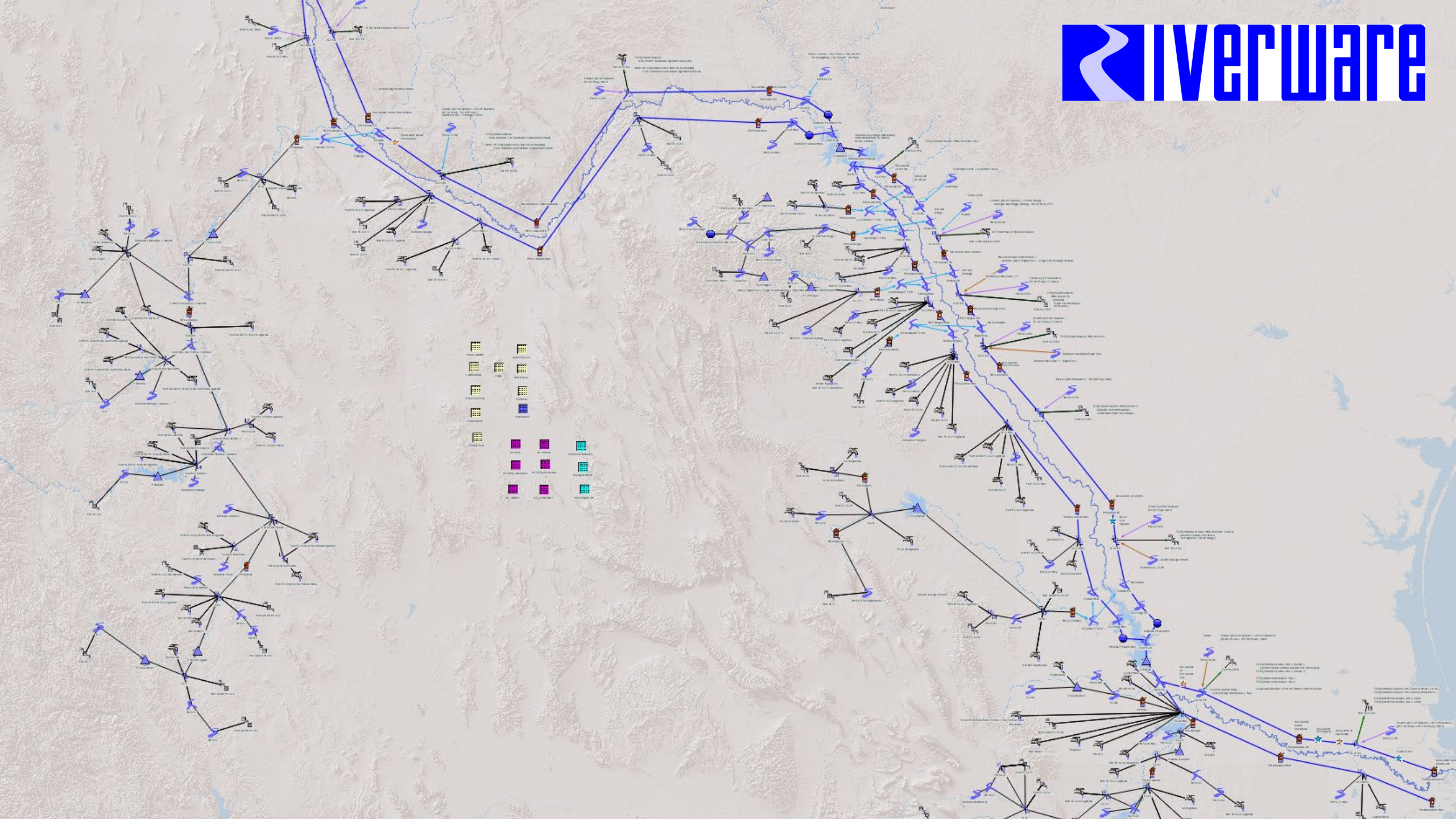
Established Work Groups

Policy Work Group

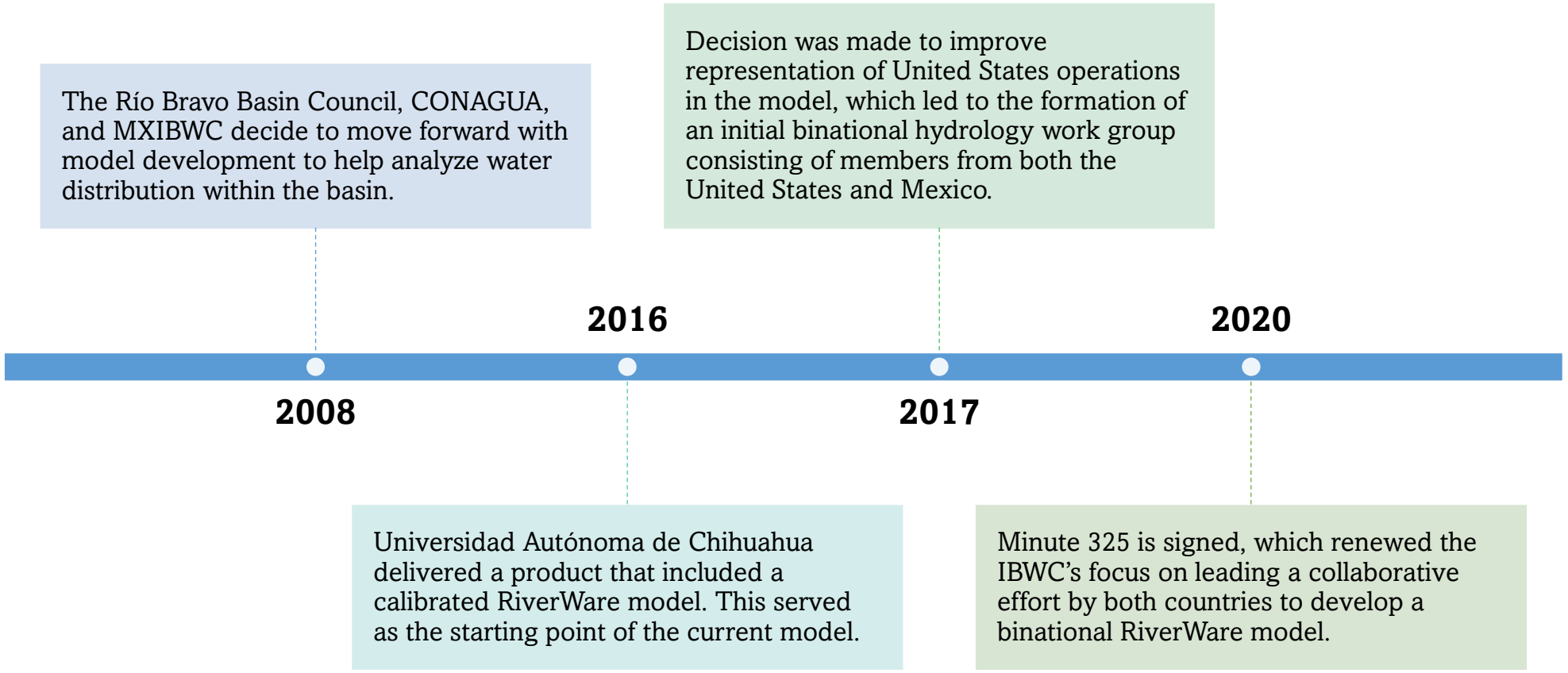
- Established to oversee the Hydrology Work Group and to consider water policies in the basin.
- Goal is to develop a Minute by December 2023 that provides increased reliability and predictability in Rio Grande water deliveries to users in the United States and Mexico.

Hydrology Work Group

- Established a Rio Grande Hydrology Work Group with technical experts from both countries.
- Purpose is to enhance information exchange, develop **a binational Rio Grande model, and use the model to analyze water management scenarios.**


RiverWare

Model/Hydrology Work Group Background



Modeling Workflow

- Develop a baseline scenario that couples current basin water management practices with 1950-2008 input hydrology.
- Develop alternate management scenarios for the same input hydrology.
- Compare results of alternate scenarios to baseline scenarios using performance metrics focused on:
  - 1944 Treaty Compliance
  - Equity of water distribution
  - Delivery volume to water users
  - Potential for Environmental Benefit

Goal

What is it Good for?

Establishing a baseline scenario and comparing it with alternative scenarios for planning purposes.

Comparing the impact that different management policies have on the distribution of water.

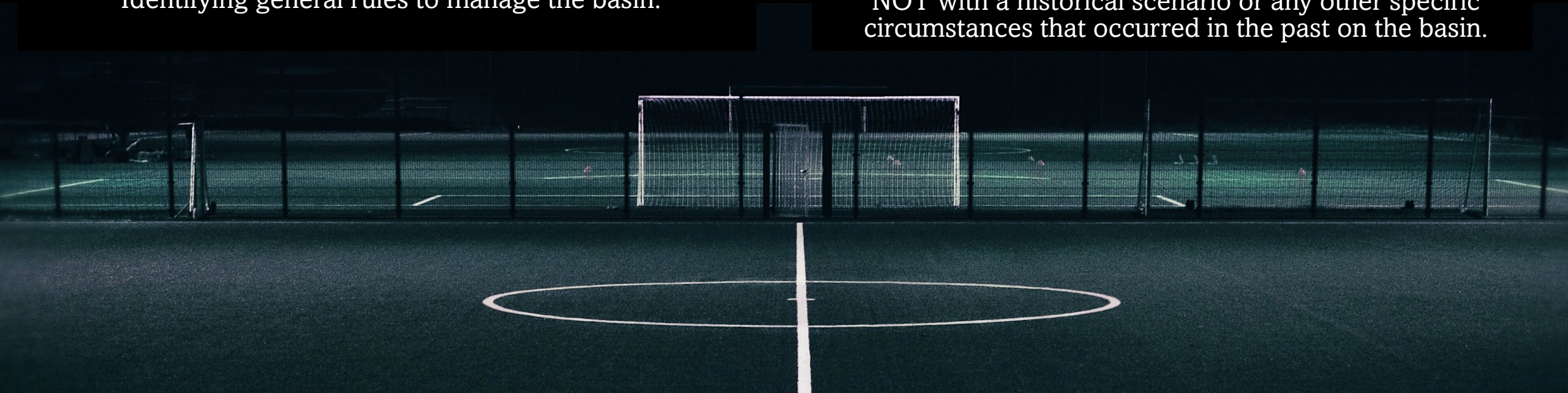
Identifying general rules to manage the basin.

What is it NOT good for?

Simulating daily operations.

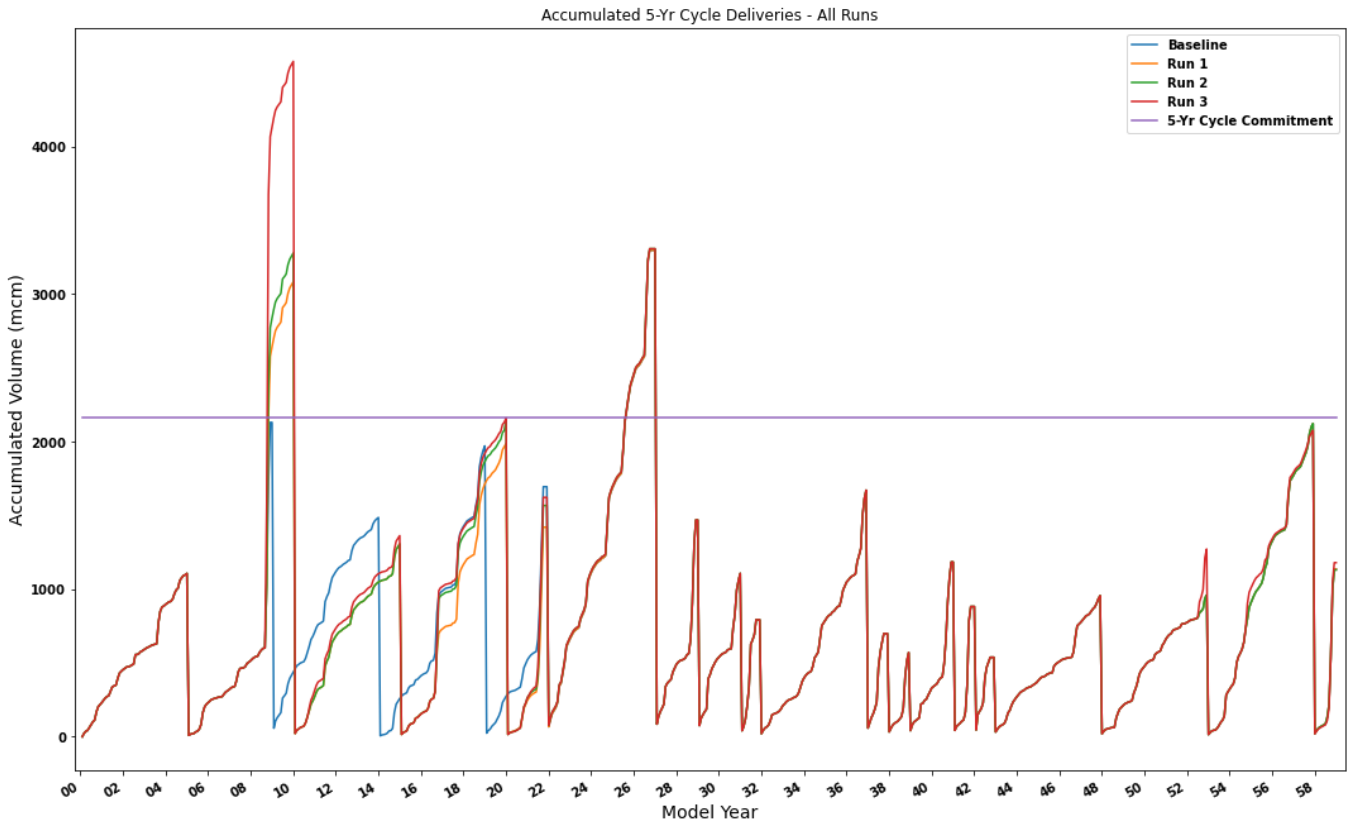
Forecasting or predicting specifics.

Results are comparable only with the reference scenario, NOT with a historical scenario or any other specific circumstances that occurred in the past on the basin.



Where are we?

- Version 1.0 near completion.
- Several scenarios have been developed and are still being added.
- Data visualization in development.



Questions?

The Team

- Kathy Alexander, TCEQ
- Hector Eduardo Álvarez Novoa, CONAGUA
- Erick Alberto Chávez Holguín, IBWC
- Adrian Cortez, IBWC
- Jose Davila, TCEQ
- Aldo Héctor García Servín, IBWC
- Andrew Garcia, TCEQ
- Manuel Rafael Rosales González, CONAGUA
- Delbert Humberson, IBWC
- Isela Jazmin Molina Torres, CONAGUA
- Stephen Lantz, DOI
- Samantha Stiffler, IBWC

INTERNATIONAL BOUNDARY AND WATER COMMISSION

UNITED STATES SECTION

Lower Rio Grande Citizens Forum

December 5, 2023

Dr. Maria Elena Giner, P.E.

USIBWC Commissioner

MINUTE 325

- Signed 10/21/20
- Binding agreement to end the 2015-2020 cycle without a debt
- Established technical and policy work groups to develop tools to **improve predictability and reliability** of Rio Grande deliveries
- Set expectation of a new Minute by Dec. 2023

Minute 325 Signing

Rio Grande Minute Team (RGMT)

Rio Grande near Brownsville, TX

Goal: **Negotiate a new Minute by Dec. 2023 to increase the predictability and reliability of Rio Grande water deliveries to users in both countries**

- IBWC Commissioners agreed in late 2022 to establish RGMT to negotiate the new Minute
- RGMT meeting regularly since early 2023

Rio Grande Policy Work Group and Minute Team

- **U.S. Members:** IBWC and State of Texas
- **Mexico Members:** CILA and CONAGUA
- **Observers:** Department of State and Secretariat of Foreign Relations
- Hydrology Work Group binational model to analyze water delivery scenarios

July 14 RGMT meeting in El Paso, TX

WORK GROUPS

- **Rio Grande Policy Work Group**
  - 10 binational meetings in since 2021
- **Rio Grande Minute Team**
  - 9 binational meetings held so far in 2023
- **Rio Grande Hydrology Work Group**
  - Meets every 1-2 months
  - Calibrations for baseline complete
  - Water delivery scenarios being analyzed
- **Environment Work Group**
  - Focus on Big Bend region
  - 5 binational meetings held since December 2022

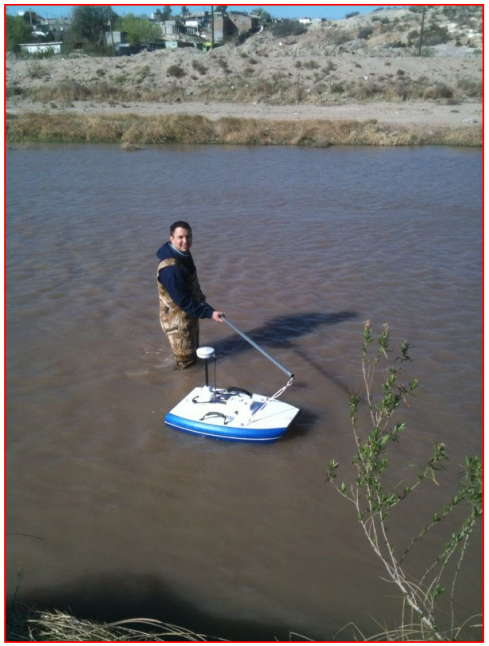
2022 Rio Grande Policy Work Group in Austin, TX

Overarching Principles

- Status quo is not working
  - Break the pattern of debt since the 1992-97 cycle
- Facilitate earlier deliveries – legal path forward for Mexico
- Collaboration between countries
  - Both Sections have to agree
  - Water needs to be put to beneficial use
- Transparency through dialogue and science
- Understand the impact to Texas stakeholders
- "Growing the Pie"
- Mexico needs to manage the basin with Texas as a user

RGMT July 14, 2023 in El Paso, TX

RIO GRANDE MINUTE – KEY ELEMENTS



Rio Grande Flow Measurement

- Reinforce existing workgroups
- Creates new workgroups
- Operational Improvements
- New tools for Mexico to comply with its 1944 Water Treaty obligations
- Temporary Minute – 5-year pilot

RIO GRANDE MINUTE – KEY ELEMENTS

Rio Grande in the Big Bend area

Workgroups:

- Reinforce existing workgroups
  - **Policy workgroup** – Framework for systematically reviewing updates, actions, and recommendations
  - **Hydrology workgroup** – Technical analyzes on potential scenarios
  - **Lower Rio Grande Water Quality Initiative** – Elevates the water quality commitment
- Establish new work groups
  - **Projects** – builds a framework to address a drying system with conservation and new water sources (*grow the pie*)
  - **Environment** – Leverages an existing group with a focus on Big Bend

RIO GRANDE MINUTE – KEY ELEMENTS

Operational Improvements:

- Improve coordination on demand and releases from Amistad and Falcon Dams
- Clarify when a 5-year cycle begins and ends
- Authorize seasonal pool to store more water in dry months

Amistad Dam

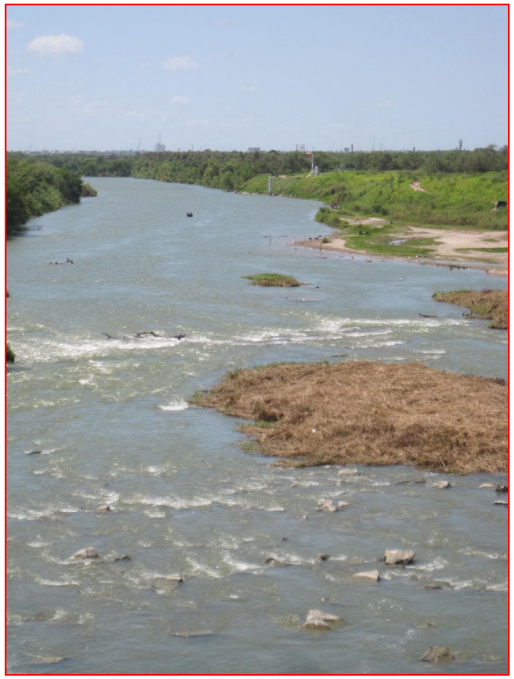
RIO GRANDE MINUTE – KEY ELEMENTS

Rio Grande near Brownsville

Advancing the Status Quo:

- Affirm a **5-year cycle**, not 10 years.
- Utilize **Minute 234** sources (reservoir transfers and greater than 1/3 share) when there's a shortfall in an *ongoing* cycle
- Create mechanisms to **incentivize deliveries** by Mexico earlier in a cycle by offering a limited credit on a greater 1/3 share in a subsequent cycle
- Reinforces need for **releases from reservoirs** beyond current practice.

RIO GRANDE MINUTE – KEY ELEMENTS



Rio Grande near Mission

Advancing the Status Quo:

- Explore possible **investment** in water conservation to benefit both countries
- Consider allotting water from **San Juan and Alamo Rivers** when agreed to by U.S. and put to beneficial use
- Continue to work on additional measures to improve the reliability and predictability in Rio Grande water deliveries, including **future Minutes**

WHY IS THIS IMPORTANT?

The **Minute process is the only formal mechanism** the USIBWC has available to encourage compliance with the Treaty.

- This new Minute **is REQUIRED by Minute 325;** a legal obligation to move forward by December 2023.
- This new Minute is CRITICAL because it takes a progressive step forward, by changing the **status quo**.
- This new Minute is CRITICAL as it **builds a framework to grow the pie** creating the start for potential conservation or new water projects for the benefit of both countries.
- This new Minute is CRITICAL as it **expands science** for transparency and sound decision-making in the future.