

#### International Boundary and Water Commission United States Section

For immediate release November 21, 2024

#### USIBWC Lower Rio Grande Citizens Forum Public Meeting on December 5

The U.S. Section of the International Boundary and Water Commission (USIBWC) Lower Rio Grande Citizens Forum board will host an in-person and virtual public meeting on **Thursday**, **December 5**, **2024**, from 3-5pm CST.

Juan Uribe, Area Operations Manager, Operations and Maintenance, providing public updates on area operations and land management activities.

**Ignacio Farias, Biologist, EGC**|**AGEISS,** will provide an update on the Arroyo Colorado vegetation management project.

**Delbert Humberson, Hydrologist, USIBWC Water Accounting Division**, will present updates to the signing of Minute 331, "Measures to Improve the Reliability and Predictability of Rio Grande Water Deliveries to Benefit the United States and Mexico." And a brief summary of Rio San Juan discussions.

The public 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. <u>Click here to join the meeting</u>. 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 +1 915-320-4718,,830887077# Phone conference ID: 761 741 972#

For those connecting via phone, the presentations will be available before the start of the meeting. Go to the USIBWC Citizens Forum page at <u>https://bit.ly/4fYv3XA</u> and look for the links for the Lower Rio Grande Citizen Forum meeting.

If you would like to speak during the public comment period, please sign up ahead of time by contacting Frankie Pinon at frankie.pinon@ibwc.gov or 915-832-4716 by noon on November 29, 2024.

Media Contact:

Frankie Pinon Email: <u>frankie.pinon@ibwc.gov</u> Phone: 915-832-4716

#### LOWER RIO GRANDE CITIZENS FORUM Thursday, December 5, 2024, from 3-5pm CST

#### USIBWC Mercedes Field Office 325 Golf Course Road Mercedes, TX 78570 And Via Teams

#### <u>Agenda</u>

- Welcome and Introductions USIBWC Citizen Forum Board
- USIBWC, Juan Uribe, Area Operations Manager, Updates to land management activities.
- EGC|AGEISS, Ignacio Farias, Biologist Updates to plot monitoring for the Arroyo Colorado vegetation management project.
- USIBWC, Delbert Humberson, Hydrologist updates to Minute 331 signing & brief summary of Rio San Juan discussions.
- Public Comment
- Board Discussion
- 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 915-832-4716 or email frankie.pinon@ibwc.gov

#### **Microsoft Teams meeting**

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

Meeting ID: 240 066 394 193 Passcode: aGEfhT

Download Teams | Join on the web

#### Or call in (audio only)

+1 915-320-4718,,761741972#

Phone conference ID: 761 741 972#

#### YEAR 3 VEGETATION PLOT MONITORING FOR THE ARROYO COLORADO VEGETATION MANAGEMENT PROJECT WITHIN THE LOWER RIO GRANDE FLOOD CONTROL PROJECT, CAMERON COUNTY, TEXAS





Year 3 Vegetation Plot Monitoring (VPM) for the Arroyo Colorado Floodway Vegetation Management Project within the Lower Rio Grande Flood Control Project (LRGFCP), Cameron County, Texas

- Introduction
- Methodology
- Monitoring Results
- Conclusion and Management Recommendations





### Introduction

- Arroyo Colorado Floodway
  - The Arroyo Colorado Floodway is a component of the LRGFCP. The USIBWC is authorized to construct, operate, and maintain any project or works constructed by the United States on the LRGFCP.
  - The LRGFCP is composed of 270 miles of levee and floodways, as well as the Arroyo Colorado Floodway, which extends from Anzalduas Dam, located approximately 13 miles downstream from Peñitas, Texas, to beyond Brownsville, Texas. The interior floodway consists of the Main Floodway, which splits into the North Floodway and the Arroyo Colorado Floodway at the City of Mercedes, Texas.



### Introduction

#### Arroyo Colorado Floodway

- The Arroyo Colorado Floodway has a design capacity of 21,000 cubic feet per second (cfs) and conveys flood flows diverted from the Rio Grande east to the Laguna Madre.
- To maintain the design capacity, reduce erosion potential, stabilize stream banks, manage wildlife habitat, and control invasive species, the USIBWC controls woody vegetation within the channel and banks.





## Introduction

#### Vegetation Removal and Revegetation Efforts

- In 2021 and early 2022, USIBWC removed approximately 70 acres of woody vegetation from a 50-foot buffer along the Arroyo Colorado Floodway, except within areas where the slope was too steep (18-degrees or greater) from Business 77 to FM 509.
- Following all woody vegetative removal activities, the USIBWC vegetation management contractor revegetated approximately 70 acres of the cleared areas along the Arroyo Colorado Floodway using native grasses, forbs, and other species.





# **Monitoring Methodology**

- In 2022, 2023, and 2024, USIBWC contracted visual plot monitoring and reporting services to support the vegetation management activities.
- The purpose of the monitoring is to determine if the herbaceous plantings are self sustaining and to:
  - Provide feedback on the maintenance program.
  - Determine compliance with the USFWS-approved 2016 vegetation management plan.





## Methodology

#### **Vegetation Monitoring Plot Locations**





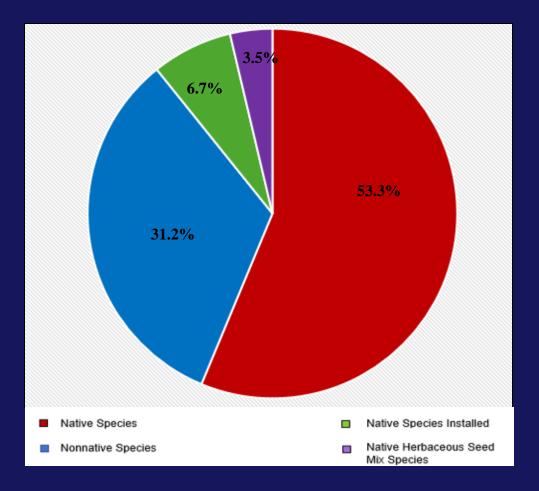
# Methodology

- Visual estimates of percent cover of all native and nonnative herbaceous species within each 1 m<sup>2</sup> quadrat were recorded.
- The distribution and abundance of nonnative herbaceous and woody species up to approximately 2 meters from each quadrat boundary were also recorded as part of a general site assessment for the revegetated areas.



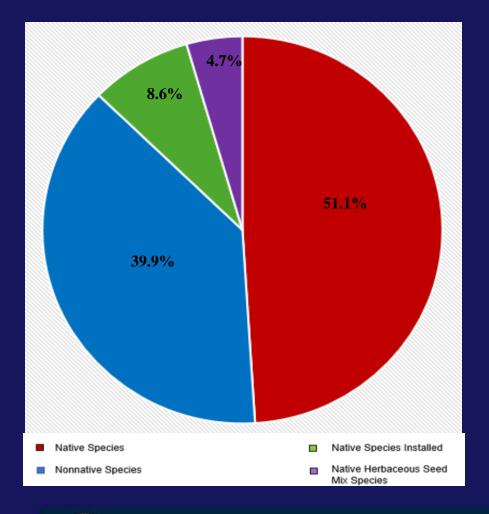


## 2022 Vegetation Plot Monitoring (Year 1)





## 2023 Vegetation Plot Monitoring (Year 2)





## **Results 2024 Vegetation Plot Monitoring**

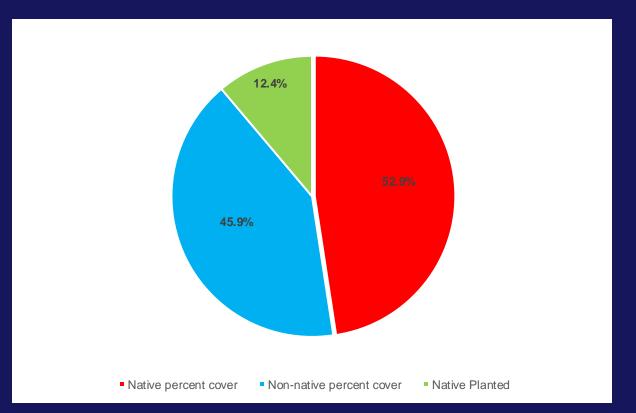
- Across all 43 plots (several plots were flooded), the average total percent cover observed during Year 3 monitoring was:
  - Approximately 98.8 percent,
  - Of that total, the average cover of native species accounted for 52.9 percent.
- The average percent cover of planted native species, was approximately 12.4 percent but only included planted species. No species that were included in the native herbaceous seed mix were

documented.





## 2024 Vegetation Plot Monitoring (Year 3)





### **Overall Results**

- General Site Assessment
- The abundance of woody species at the sites was about 58 percent across the Year 3 plots with common reed the most commonly observed woody species across the site.
- To date, colonization of the revegetated areas by volunteer native species is high and over half of the vegetative cover at the project is provided by these volunteer native species. The most commonly observed volunteer native groundcover species were sea oxeye and common reed.



# Comparison of Year 1, Year 2, and Year 3 Monitoring

• The project did not meet the final success criteria for Year 1, Year 2, or Year 3.

Species Classification	Success Criteria	Total Cover Year 1	Total Cover Year 2	Total Cover Year 3
Native Herbaceous Seed Mix Species	20 percent	3.5 percent	4.7 percent	0 percent
Nonnative Species	80 percent free of nonnative species	31.2 percent (68.8 percent free of nonnative species)	39.9 percent (60.1 percent free of nonnative species)	45.9 Percent (54.1 percent free of nonnative species)
All Species	N/A	83.3 percent	90.6 percent	98.8 percent
All Native Herbaceous Species	N/A	53.3 percent	51.1 percent	52.9 percent
All Planted Species (Native Herbaceous Seed Mix Species and Native Plants Installed)	N/A	10.2 percent	8.6 percent	12.4 percent



### **Overall Results**

- Comparison of Year 1, Year 2, and Year 3 Monitoring
  - The most common seed mix and/or planted species observed during Year 1 were coastal germander and Maximilian sunflower.
  - For Year 2, the most common seed mix and/or planted species observed were hooded windmill grass and sprawling lippia.
  - For Year 3, the most common planted species observed were Rio Grande dewberry and sprawling lippia.





## Conclusions

- The primary goals of the removal of woody vegetation along the Arroyo Colorado Floodway and the revegetation of cleared areas using native grass, forbs, and other species were to:
  - stabilize the channel banks;
  - maintain the channel's 21,000 cfs design flood conveyance, and;
  - provide vegetative cover and habitat for wildlife in compliance with the vegetation management plan and USFWS informal consultation.
- While the project did not meet the Year 1 through Year 3 final success criterion, the vegetation that is currently present along the banks of the Arroyo Colorado does help to stabilize the channel banks and allow for design flood conveyance.
- Further, common reed along the banks of the arroyo does provide some vegetative cover and travel function for wildlife, but of a lower value than expected from the species planted.





# Conclusion and Management Recommendations

- Despite high vegetation cover, USIBWC may consider additional seeding and/or planting in order to increase native cover.
- For best results if using seed mixture, including maximizing germination rates of native grasses and reducing the germination rates of invasive plant species, native grass seeding would take place in late summer or early fall (between 20 August and 30 September).
  - It is possible the low cover of the seed mix species observed during monitoring was due to the initial timing of seeding that was completed by the vegetation management contractor later in the year (November and December).
  - It may also be that site preparation prior to seeding was not sufficient to ensure seed-soil contact.
  - It may also be because the Rio Grande Valley of Texas has been experiencing severe drought since 2022 and has continued into 2024.





# Conclusion and Management Recommendations

- Conduct monthly monitoring immediately following any additional revegetation efforts in order to monitor seed sprout and survival of the installed plants.
- Spot herbicide treatment program to target the nonnative grasses using glyphosate herbicide.
  - This action may reduce the amount of unwanted nonnative plants that would later impede native plant establishment and would complement efforts that are already occurring along the arroyo, such as the efforts at Hugh Ramsey Nature Park to remove Guinea grass.
  - Once establishment of the native plantings occurs, the spread and reinvasion of nonnatives will likely be slowed significantly.
- Annual monitoring reports can be found on the USIBWC website at: <u>https://www.ibwc.gov/reports-studies/</u> (Natural Resources tab)





#### **INTERNATIONAL BOUNDARY AND WATER COMMISSION**

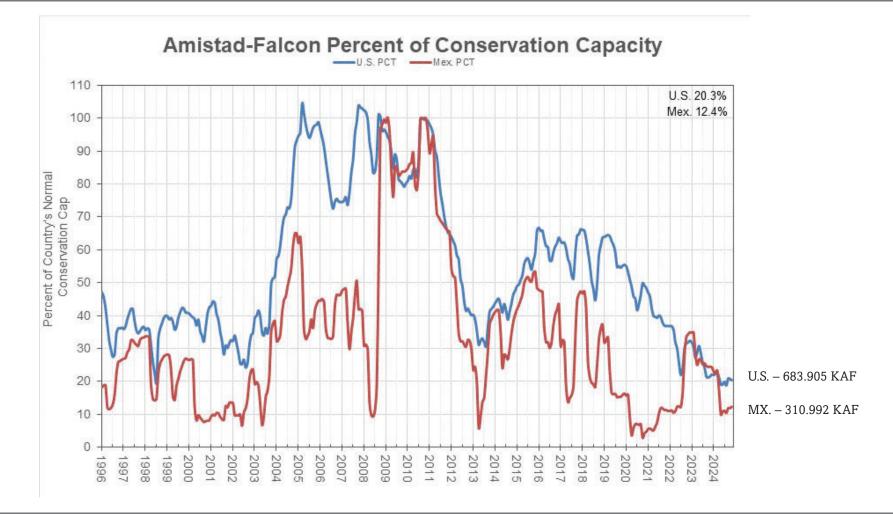
#### UNITED STATES SECTION

#### Minute 331 and Rio San Juan Update

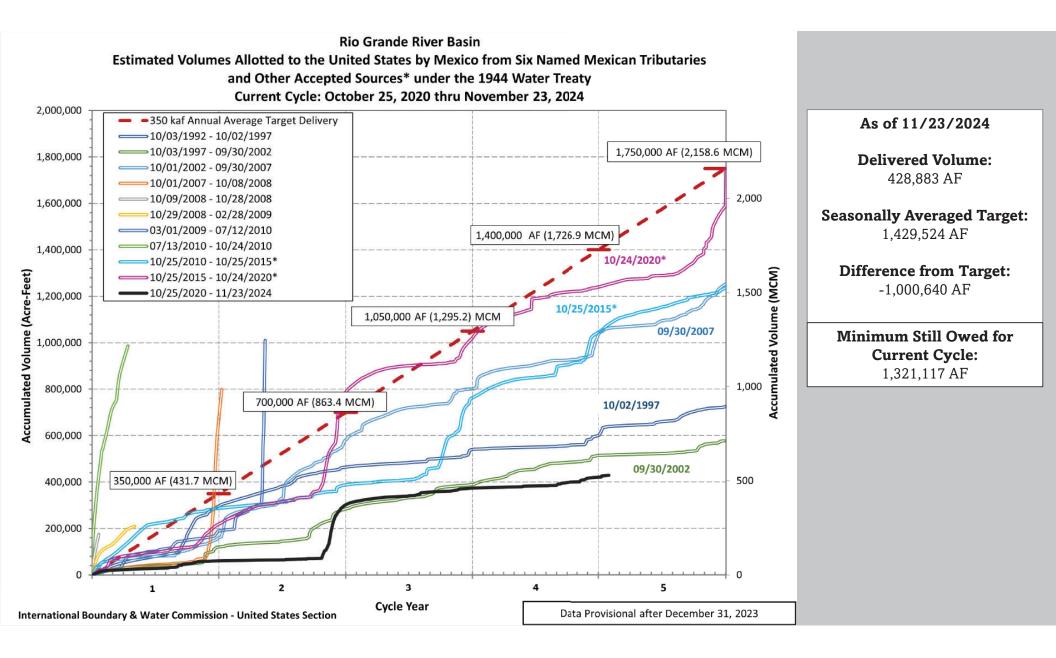
05 December 2024

Delbert Humberson USIBWC Hydrologist

#### Ownership Trends 1996 – November 23, 2024

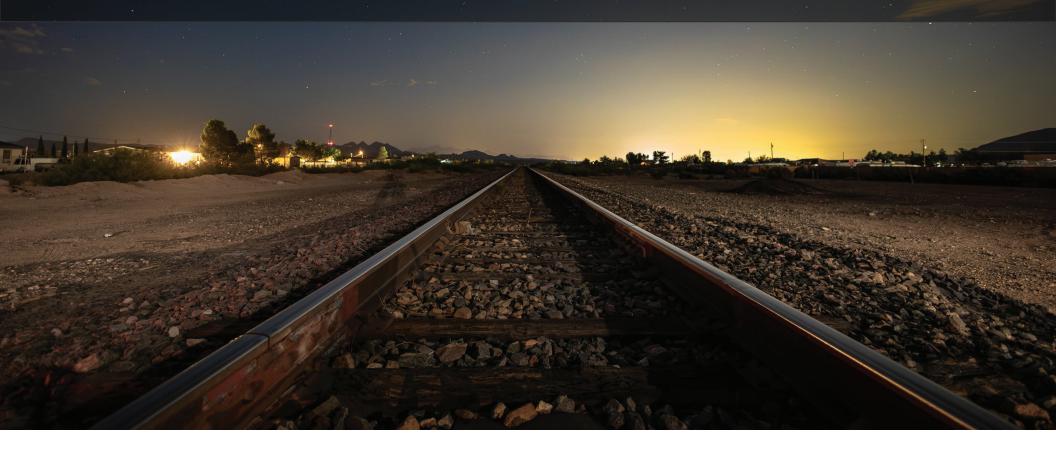


U.S. Storage: 20.3% Combined, 26.6% (482.081 KAF) in Amistad, 12.9% (201.824 KAF) in Falcon



"Being satisfied with the status quo means you are not making progress."

– Katsuaki Watanabe





# SIGNING OF MINUTE 331 – NOV. 7, 2024



First major minute regarding Water **Deliveries under the 1944 Treaty since** 1969 (Minute 234)

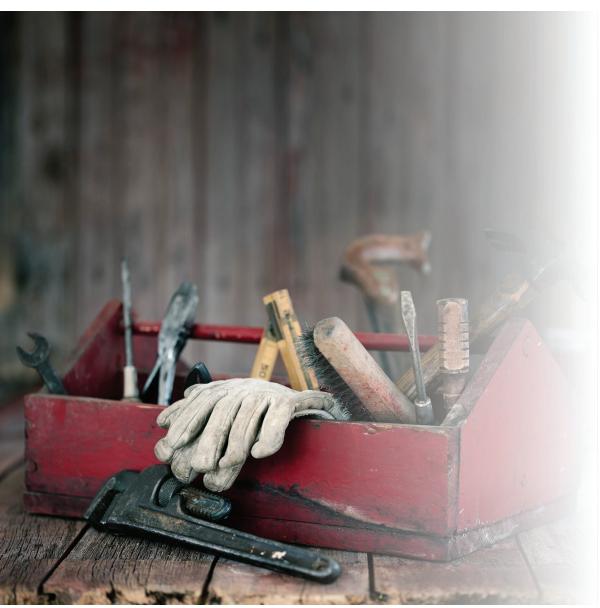
Ciudad Juarez, Mexico

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



Minute 331 Work Groups

- Continues Support for the Rio Grande Policy and Hydrology Work Groups
- Establishes a Projects Work Group to Develop Conservation and New Water Sources
  Projects
- Establishes an Environmental Work Group to Address Environmental Aspects in the Rio Grande
- Continued support of the Lower Rio Grande Water Quality Initiative to address Water Quality Concerns
- No Expiration Date on these Provisions



#### Minute 331 Tools

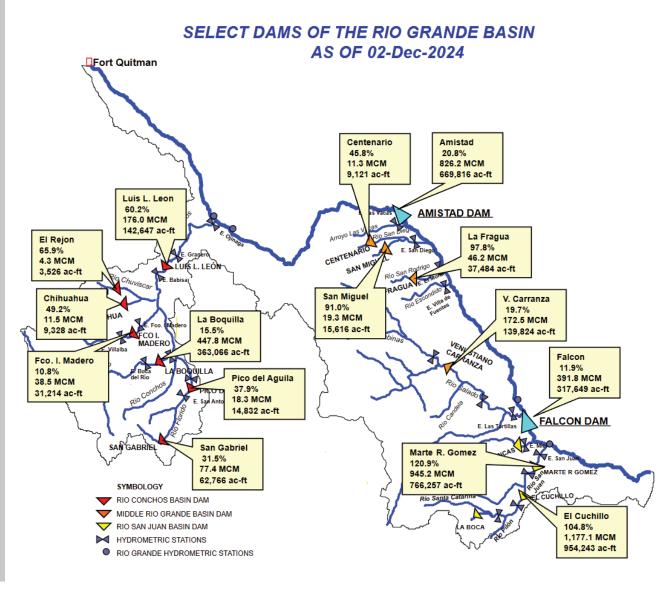
Agencies in both countries at multiple levels agreed that we needed new tools to improve the reliability and predictability of Rio Grande Water Deliveries.

- Mexico will release excess storage in reservoirs on the 6 named tributaries to the Rio Grande Main Stem.
- Mexico will consider allocating volumes towards fulfilling delivery obligations to reduce/avoid deficiencies.
- Use of Mexico's portion of the 6 named tributaries at any time, subject to agreement by both countries.



#### Minute 331 Tools

- Direct transfer of Mexico's waters in Amistad and Falcon to the United States, subject to agreement by both countries.
- Use of Rio San Juan and Rio Alamo in accordance with Article 9(e) of the 1944 Water Treaty, and when the United States can put it to beneficial use, subject to agreement by both countries.
- The ability to use these tools expires 5 years after the signing of minute, unless both countries agree to extend the timeline via a subsequent Minute.



Rio Conchos	Conservation	Current Storage	Percent of
Basin	Storage (KAF)	(KAF)	Conservation
San Gabriel	198.973	62.765	31.5%
La Boquilla	2,345.843	363.067	15.5%
Fco. I Madero	288.033	31.215	10.8%
Pico del Aguila	39.117	14.832	37.9%
Chihuahua	18.957	9.328	49.2%
El Rejon	5.351	3.526	65.9%
Luis L. Leon	237.104	142.648	60.2%
Total	3,133.378	627.381	20.0%

Middle Rio	Conservation	Current Storage	Percent of
Grande	Storage (KAF)	(KAF)	Conservation
Centenario	19.935	9.121	45.8%
San Miguel	17.161	15.616	91.0%
La Fragua	38.342	37.483	97.8%
V. Carranza	708.640	139.825	19.7%
Total	784.078	202.046	25.8%

Rio San Juan	Conservation	Current Storage	Percent of
& Alamo	Storage (KAF)	(KAF)	Conservation
El Cuchillo	910.542	954.244	104.8%
Marte R. Gomez	633.731	766.257	120.9%
Las Blancas	67.924	19.840	29.2%
Total	1,612.197	1,740.341	107.9%



# USE OF RIO SAN JUAN WATER

### Mexico's Offer

- Volume:
  - Original Offer: 150 million-m<sup>3</sup> (MCM)/121.6 thousand-af (KAF)
  - Additional Offer: 100 MCM (81.1 KAF)
  - Total Offer: 250 MCM (202.7 KAF)
- Period of Availability: Through September 2025
- Transfers at Anzalduas Dam
- Mexico Gets 5-Year Credit for 95% of the Transfer Volume (142.5 MCM/115.5 KAF)





- Developed in coordination with IBWC, TCEQ, and CONAGUA.
- Improves operations by ensuring everyone is on the same page.
- Stipulates that the United States will analyze operations to ensure they are in the interest of our users.
- United States can cease deliveries from the San Juan if we determine that we no longer want that water.
- First order for 10 cms has been submitted and was transferred yesterday (December 4, 2024).

### Operational Guidelines



#### Prior to Transfers Taking Place

- Drafted operational guidelines to be used by both countries.
- Coordinated binational negotiations to accept Mexico's offer and accept operational guidelines.
- Developed order/projection submission form to ensure a smooth transition in Anzalduas operations.
- Developed order tracker that provides TCEQ and USIBWC 24/7 monitoring of orders, waters in transit, volume transferred, and remaining water available for order.
- Developed tool to analyze system behavior downstream of Anzalduas to ensure U.S. interests are met.

• Will coordinate binational daily meetings as necessary among river operators to:

**Moving Forward** 

- provide assurance that operations continue moving smoothly.
- proactively discuss/address operational issues.
- Will analyze system behavior and loss rates downstream of Anzalduas to ensure U.S. interests are met.
- In Development:
  - Online dashboards to support Anzalduas operations.



Benefits of Using San Juan Water

- It is wet water that we can be delivered and used right now.
- Water transferred at Anzalduas Dam means more U.S. water retained at Falcon Reservoir
- We are giving credit for water used, and we are not giving credit for water lost in transit from upstream.
- United States can stop their orders if needed.
- Current agreement is flexible we will assess as time goes on to ensure it is in the interest of both countries.

### Updated Amistad Fact Sheet Now Available

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