

INTERNATIONAL BOUNDARY AND WATER COMISSION

COMISIÓN INTERNACIONAL DE LÍMITES Y AGUAS

Dr. Maria-Elena Giner, P.E. Commissioner (U.S. Section) International Boundary and Water Commission





Rio Grande at Ft. Quitman

Conchos-Rio Grande confluence

RIO GRANDE - Mexican Historical Deliveries



International Boundary & Water Commission - United States Section



2020 – 2025 CYCLE RESERVOIR STATUS



Cooperation on the Rio Grande

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.

Hymberto Marengo Mogollón Javne Harkins kican Commissioner **U.S.** Commissioner José de Jesús Luevano Grano Sally E. Spener **U.S. Section Secretary** Mexican Section Secretary ERNACIONAL DE



Cooperation on the Rio Grande

Minute 325

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



Cooperation on the Rio Grande



Calibration underway Scenarios will be analyzed considering impacts in both countries Policy work group and Hydrology workgroup formed

RIO GRANDE WHITE PAPER

Scope of Work

- Procure contractor March 2022
- Review existing studies/reports on Minutes 319 & 323 on the Colorado River
 - Conduct interviews to assess the success and shortcomings of water conservation efforts

Review existing studies/reports on Rio Grande treaty water deliveries

Conduct interviews to assess the success and shortcomings of deliveries to/from Mexico



Amistad Dam

Falcon Dam (2002)



RIO GRANDE WHITE PAPER

Scope of Work

- For the Rio Grande, review existing proposals for a binational effort to develop water conservation, new water sources & movement of water between countries (such as water markets)
- Review proposals by MxIBWC and others to increase deliveries to the Rio Grande
- Assess existing legal structures and hurdles, feasibility, strengths, challenges of potential approaches
- Propose creative solutions to develop and implement proposals



RIO GRANDE CONSERVATION

El Morillo Drain

- Drain is 24 miles with capacity of 3.26 cms (77 KAF)
- Potential desalination plant
- Recover 83,503 acre-feet (103 mcm) per year, which is nearly 24% of Mexico's annual Treaty delivery of 350 KAF
- Estimated cost in 2016, including the desalination plant and associated conveyance lines, \$40 M/\$250 per AF (824 million pesos)
- Lower salinity from 3000-4000 ppm to 1000 ppm

San Juan River

Explore possible scenarios where the water delivered would be different from that credited to the five-year cycle; for example, for every 100 acre-feet of water delivered from the San Juan River would receive 50 acre-feet credit.

Brownsville-Matamoros Weir

- Choose new location acceptable to Mexico
- Capacity would be 60 KAF (7.4 mcm)
- A way to capture waters that would otherwise flow to the Gulf of Mexico.

Falcon-Matamoros Aqueduct

- Construct an aqueduct from Falcon Dam to Matamoros to convey the city's municipal water supply in a manner that would greatly reduce conveyance losses.
- Current use by Matamoros is 77 KAF (3cms) but they release 255 KAF (10 cms) to get the water to the city.
- Project would cost \$295 million dollars(6 billion pesos) for a 160 mile aqueduct which could yield 178 KAF in saved water



RIO GRANDE CONSERVATION

- Wastewater Reuse of Mexico Regional Plants
- Raising elevations of Boquilla, Luis L. Leon, and Francisco I. Madero Dams to store water for Treaty delivery; this would be an infrastructure for water exchange
- Conservation water for Big Bend

