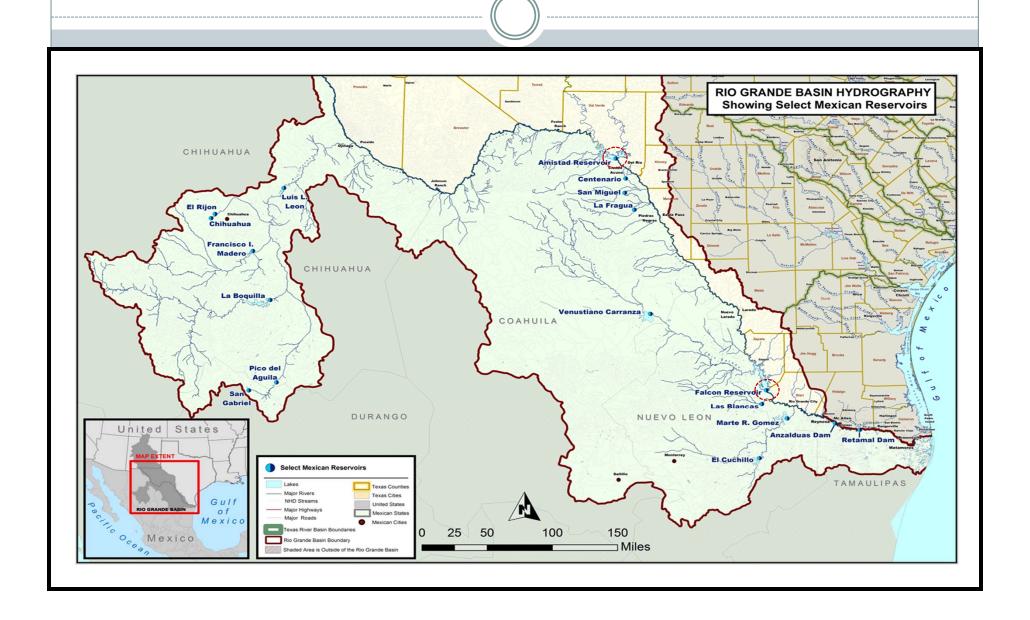
1944 Treaty Between the United States of America and Mexico

KATHY ALEXANDER, PH.D.
TEXAS COMMISSION ON
ENVIRONMENTAL QUALITY
ASSOCIATION OF WESTERN STATE
ENGINEERS
OCTOBER 21, 2015

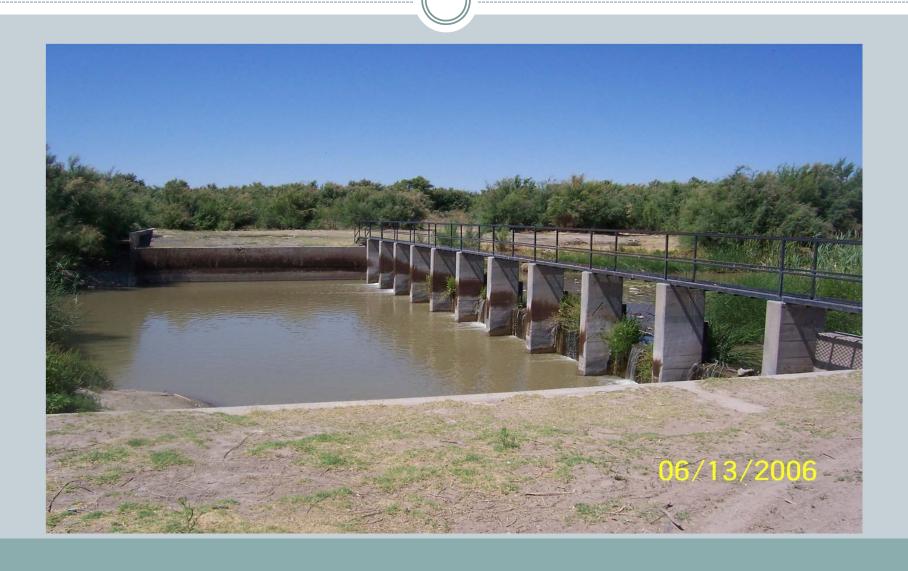
Binational Rio Grande



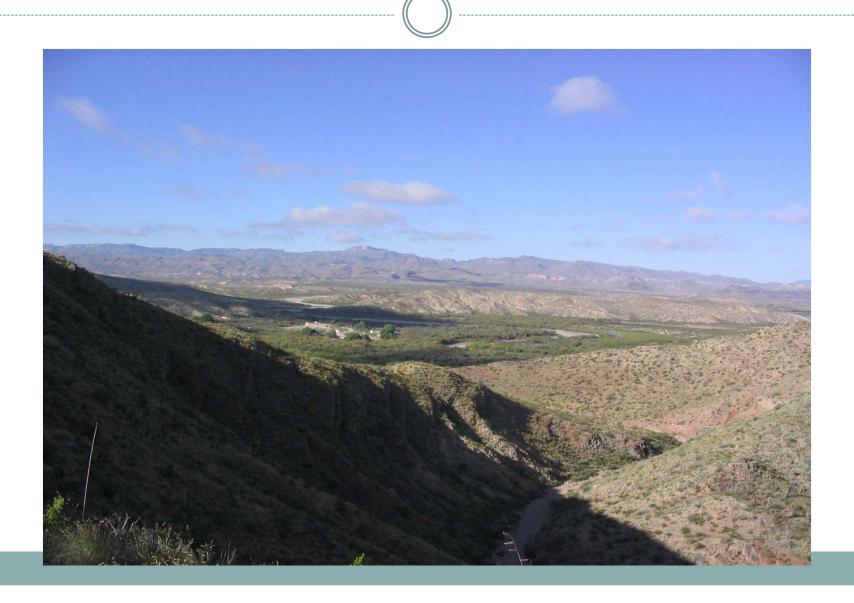
1944 Treaty and Watermaster Programs

- Chairman Bech Bruun of the Texas Water
 Development Board is the Texas representative for treaty negotiations with Mexico.
- The Texas Commission on Environmental Quality manages the Watermaster Program in the Rio Grande.

Upper Rio Grande – Fort Quitman



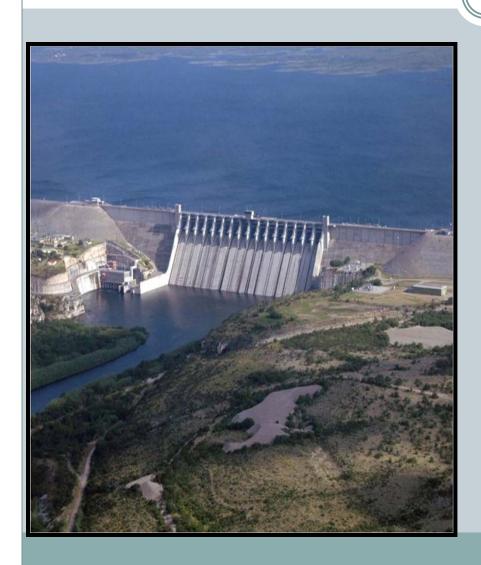
Upper Rio Grande – Forgotten River

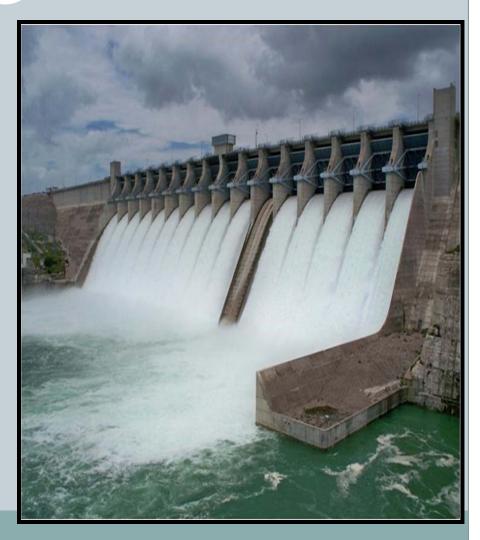


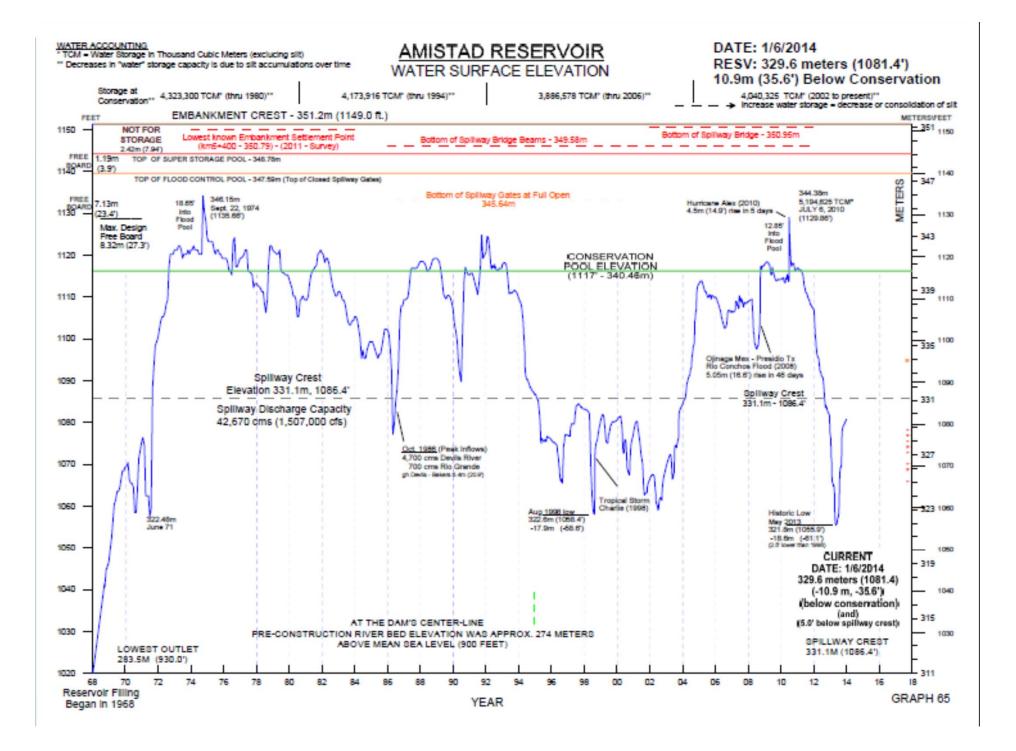
Upper Rio Grande – Rio Conchos/Presidio



Amistad International Dam



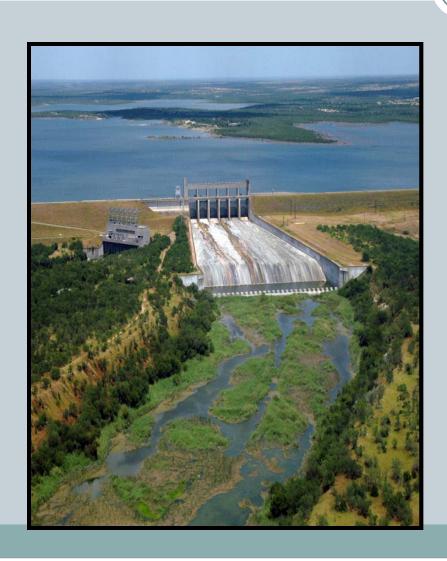


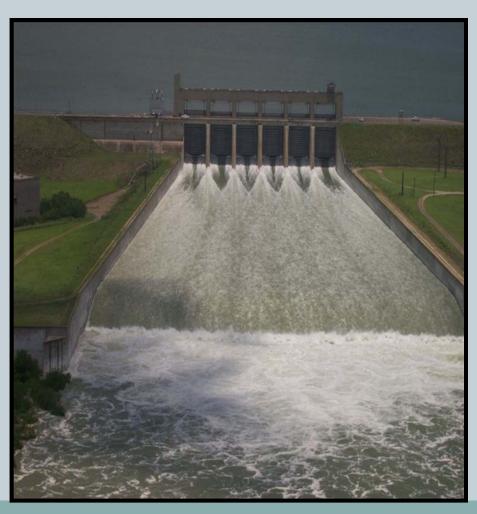


Middle Rio Grande - Laredo



Falcon International Dam





Water Storage* FALCON RESERVOIR Date: 1/6/2014 Change in storage capacity at Conservation based on silt surveys. Resv: 83.92 meters (275.3') (WATER SURFACE ELEVATION) (Thousand of Cubic Meters) Changes in storage due to sit accumiation. 7.9 meters (25.9') Below Conservation 3,410,072 TCM* 1956 3,290,072 TCM* 1971 3,271,653 TCM* 1992 3,264,813 TCM* 2002 - thru present meters feet EMBANKMENT CREST 98.45M (323.0') 320 Top Super Storage 95.77m (314.2') Hurricane Alex and Tropical Depression #2 July 2010 93.88m 94.28m Peak 310 -6.4m (21.0') Rise in 15 days July 17, 2010 Sept. 50 Top Flood Pool 93.48m (306.7°) 300 \$1.80 m (301.21) (Criginal 280.47) Ojinaga Mex - Presidio Tx Rio Conchos Flood (2008) 7.28m (23.8') Rise in 63 days 290 88 280 270 260 3PILLWAY CREST 78.24m (256.70') CURRENT SPILLWAY DISCHARGE CAPACITY DATE: 1/8/2014 12,914 m³/s @ 95.77 meter. pool 250 -RESV: 83.92 meters (276.3') 7.9 meters (26.9') Below-Normal Conservation Pool (Spillway Water Surface ic) (6.7m (18.8) Post Const. Low Aug. 2001 240 -75.28m (248.98°) -16.5m (154.2°) (Above the Spillway Crest) 72.84m 72 Jan. 57 230 -68 220

OLD RIVER BOTTOM 53.34m (175.00')

84 86

YEAR

LOWEST OUTLET MEX.

10

61.96m (203.3°)

98 2000 02

LOWEST OUTLET U.S.

72 74

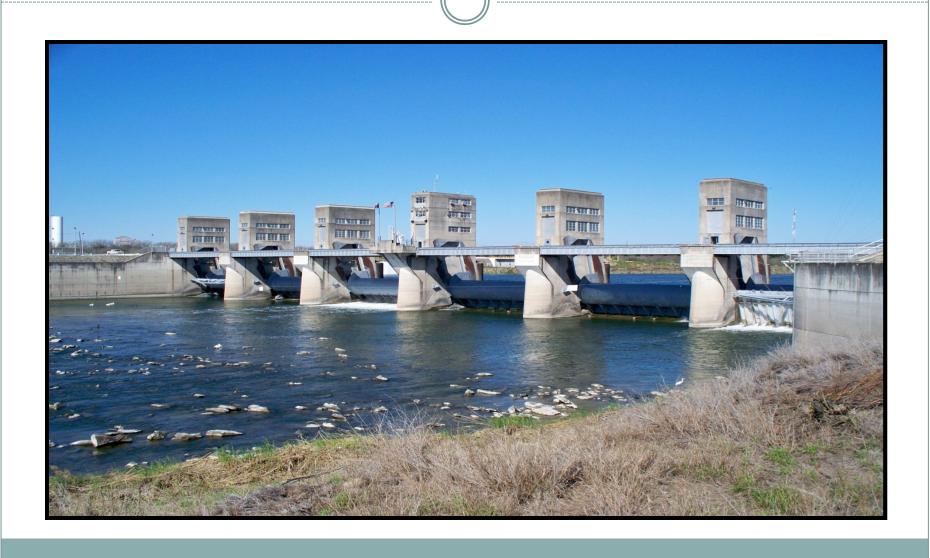
76

70

68.58m (225.0')

210

Anzalduas Dam

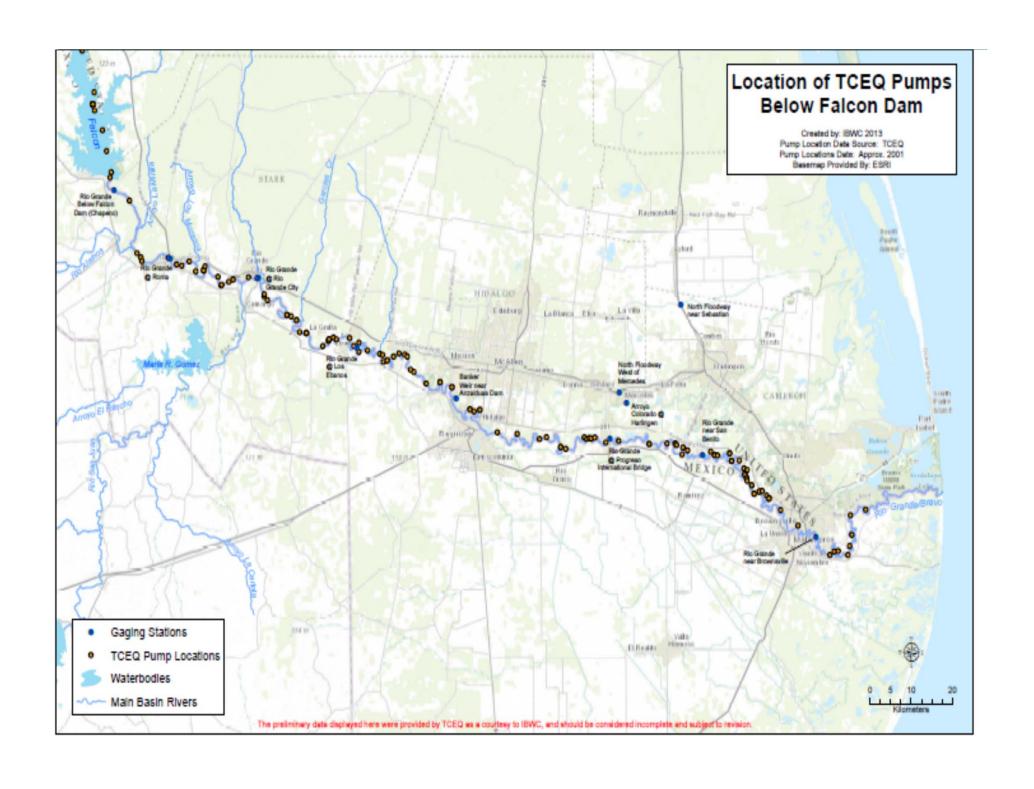


Lower Rio Grande Valley

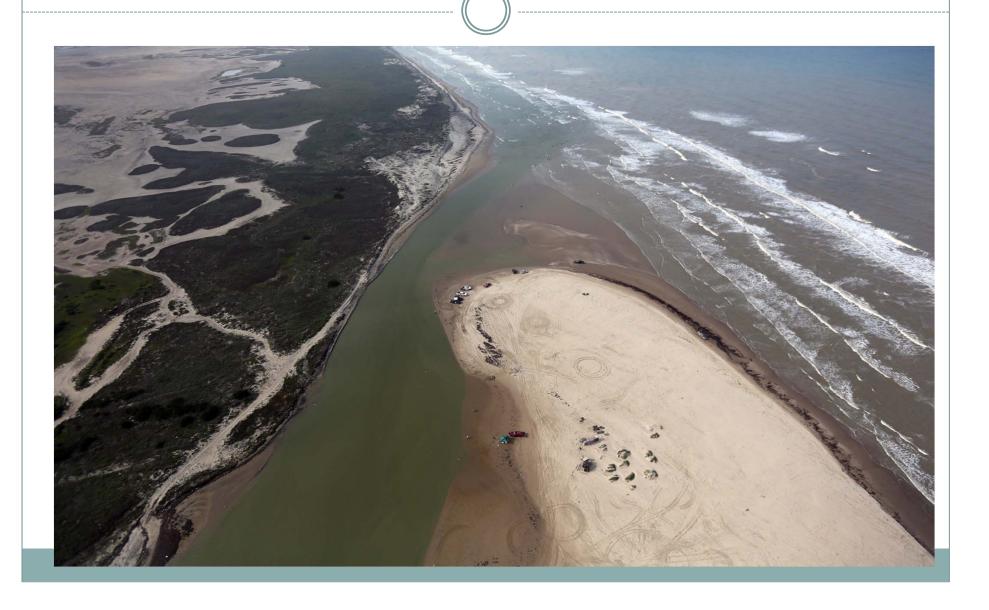


Lower Rio Grande Valley





Mouth of the Rio Grande



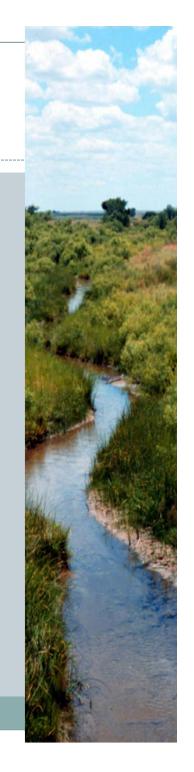
The 1944 Treaty





The 1944 Treaty

- Signed in Washington DC on 2/3/44
- Ratified by the Senate on 4/18/45
- Creates the International Boundary and Water Commission (IBWC)
 - in charge of administering and ensuring compliance with the treaty provisions
- Utilization of the Colorado and Tijuana Rivers and of the Rio Grande
- Apportions water between the United States and Mexico



1944 Water Treaty Rio Grande

Mexico receives:

- 100% of the Rio San Juan and Rio Alamo
- 66% of the Rio Conchos,
 Rio San Diego, Rio San
 Rodrigo, Rio Escondido,
 Rio Salado, and Las Vacas
 Arroyo
- 50% of all other flows not otherwise allocated

United States receives:

- 100% of the Pecos and Devils Rivers, Good-enough Spring, and Alamito, Terlingua, San Felipe, and Pinto Creeks
- 33% from the Rio Conchos, Rio San Diego, Rio San Rodrigo, Rio Escondido, Rio Salado, and Las Vacas Arroyo
- 50% of all other flows not otherwise allocated

Issues – Federal Response

On December 16, 2014, P.L. 113-235, the Consolidated and Further Continuing Appropriations Act of 2015, became law; Section 7045(g)(3) of Division J of the law required the U.S. Section of the IBWC to report to the Committees on Appropriations on various water delivery and accounting issues:

Not later than 45 days after the enactment of this Act, the Secretary of State, in consultation with the Commissioner for the United States Section of the International Boundary and Water Commission (IBWC), shall report to the Committees on Appropriations on the efforts to work with the Mexico Section of the IBWC and the Government of Mexico to establish mechanisms to improve the transparency of data on, and predictability of, the water deliveries from Mexico to the United States to meet annual water apportionments to the Rio Grande, in accordance with the 1944 Treaty between the United States and Mexico Respecting Utilization of Waters of the Colorado and Tijuana Rivers and of the Rio Grande, and on actions taken to minimize or eliminate the water deficits owed to the United States in the current 5-year cycle by the end of such cycle: Provided, That such report shall include a projection of the balance of the water delivery deficit at the end of the current 5-year cycle, as well as the estimated impact to the United States of a negative delivery balance.

Current Status – as of 10/3/2015

- The current cycle began on October 25, 2010.
- The pro-rated deficit as of 10/3/2015 is 278,118 AF for this cycle.
- During the first year of the cycle, Mexico delivered 288,309 AF, during the second year 100,401 AF, during the third year 392,142 AF, during the fourth year 343,898, and to date 326,036 AF for the fifth year.
- The running total of deliveries for this 5-year cycle is 1,450,786 AF.

Current Status – as of 10/10/2015

- Overall the system is at 52.77 percent of normal conservation capacity:
 - Amistad is at 54.30 percent of conservation capacity (3,125,287 AF)
 - Falcon is at 50.88 percent of conservation capacity (1,346,589 AF)
- On October 10, 2015, the U.S. combined ownership in Amistad/Falcon is at 54.26 percent of normal conservation capacity, (1,840,312 AF), up from 43.29 percent (1,468,196 AF) of normal conservation capacity a year ago at this time.
- Mexico's combined ownership in Amistad/Falcon is at 50.78 percent of normal conservation capacity (1,284,975 AF) at.

Ownership in Amistad and Falcon Reservoirs

