

# INTERNATIONAL BOUNDARY AND WATER COMMISSION

## *Rio Grande Water Deliveries under the 1944 Water Treaty*

Sally Spener, U.S. Secretary  
November 12, 2014  
Lower Rio Grande Citizens Forum Meeting



# 1944 WATER TREATY

- ◆ Covers Rio Grande from Ft. Quitman to the Gulf
- ◆ Mexico delivers water to the US from 6 tributaries
- ◆ US receives 1/3 of flows arriving in the Rio Grande from the 6 tributaries
- ◆ 1/3 shall not be less, as an average amount in cycles of 5 consecutive years, than 350,000 acre-feet annually



Ft. Quitman levee at gaging station



# 1944 WATER TREATY



**Amistad Dam**



**Falcon Dam**

- ◆ US and Mx water stored at 2 international reservoirs
  - ▶ Amistad Dam – at Del Rio-Ciudad Acuña
  - ▶ Falcon Dam – near Falcon Heights, TX



# 1944 WATER TREATY

- ◆ All major US tributaries allotted 100% to US
- ◆ 6 Mx tributaries allotted 1/3 to US, 2/3 to Mx:
  - ▶ Conchos, Salado, Arroyo las Vacas, San Rodrigo, Escondido, San Diego
- ◆ Mx tributaries allotted 100% to Mx
  - ▶ San Juan, Alamo
- ◆ Approx. 70% of basin's water originates in Mexico but basin's supply is split 50-50 between US and Mx

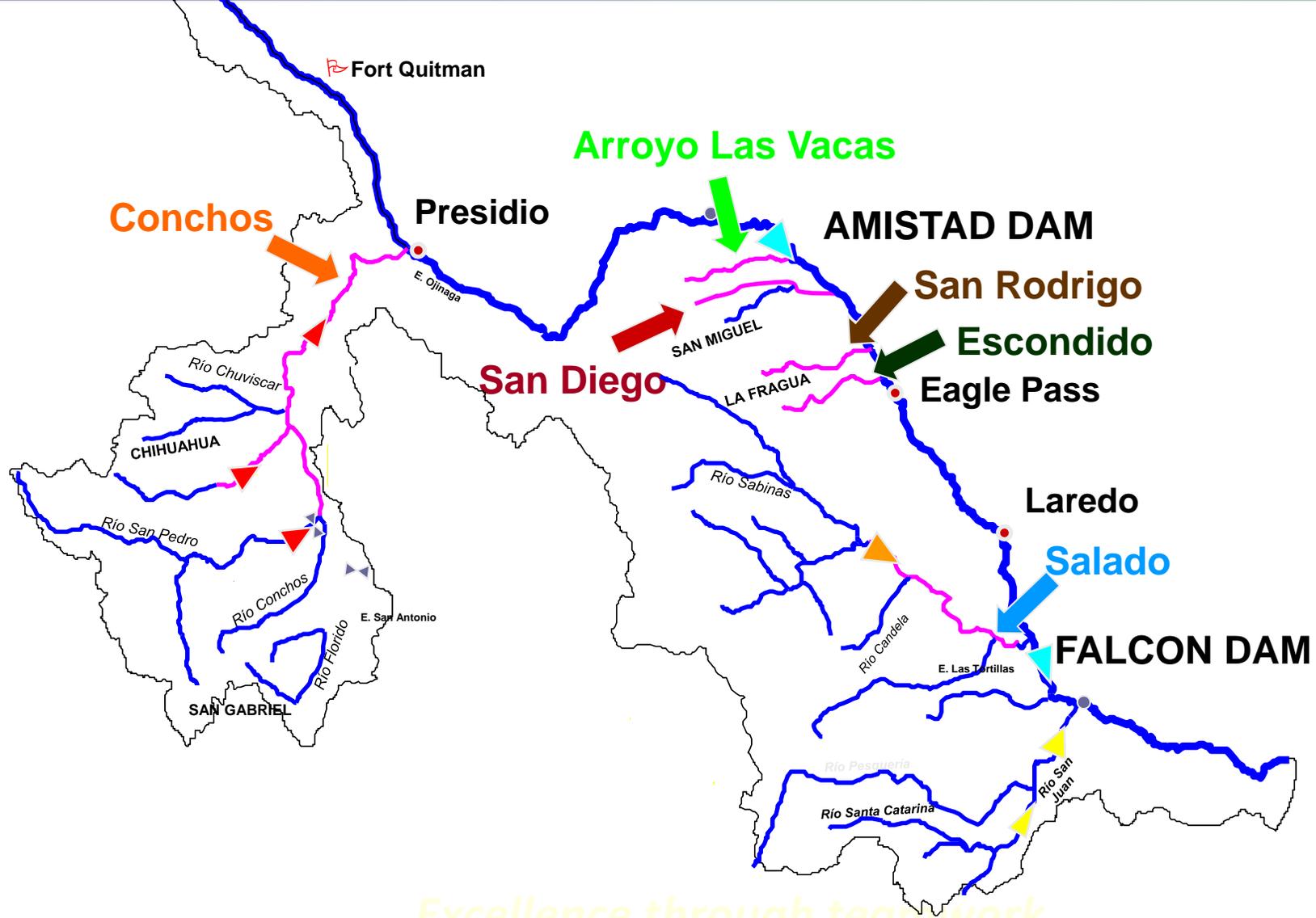


**Madero Dam on the Conchos River released floodwaters in 2008**



# 1944 WATER TREATY

## MEXICO'S TREATY TRIBUTARIES



*Excellence through teamwork.*



# 1944 WATER TREATY

- ◆ Mexican deliveries to the US are continuous
- ◆ USIBWC always receives 1/3 of the flow arriving from the 6 Mexican tributaries



Conchos River-Rio Grande Confluence



# 1944 WATER TREATY

- ◆ Current 5-year cycle began 10/25/10
- ◆ Mexico has until 10/24/15 to deliver 1.75 maf
- ◆ Exceptions:
  - ▶ Extraordinary drought
  - ▶ Serious accident
  - ▶ When US conservation capacity fills in the reservoirs, all debts are canceled and a new cycle begins
- ◆ If a cycle ends in deficit, Mx repays in next cycle



**Rio Grande downstream from Anzalduas Dam**



# 1944 WATER TREATY

- ◆ Current cycle began after U.S. conservation capacity filled at the 2 dams
- ◆ 2010 saw worst flooding since 1967
- ◆ 2011 saw worst drought since 1789
  - ▶ 100% of TX in some form of drought in Oct. 2011
  - ▶ 89% in exceptional drought
- ◆ Current cycle began with full reservoirs



**Main Floodway 2010**



# 1944 WATER TREATY

## North American Drought Monitor

July 31, 2011

Released: Wednesday, August 10, 2011

<http://www.ncdc.noaa.gov/nadm.html>

Analysts:

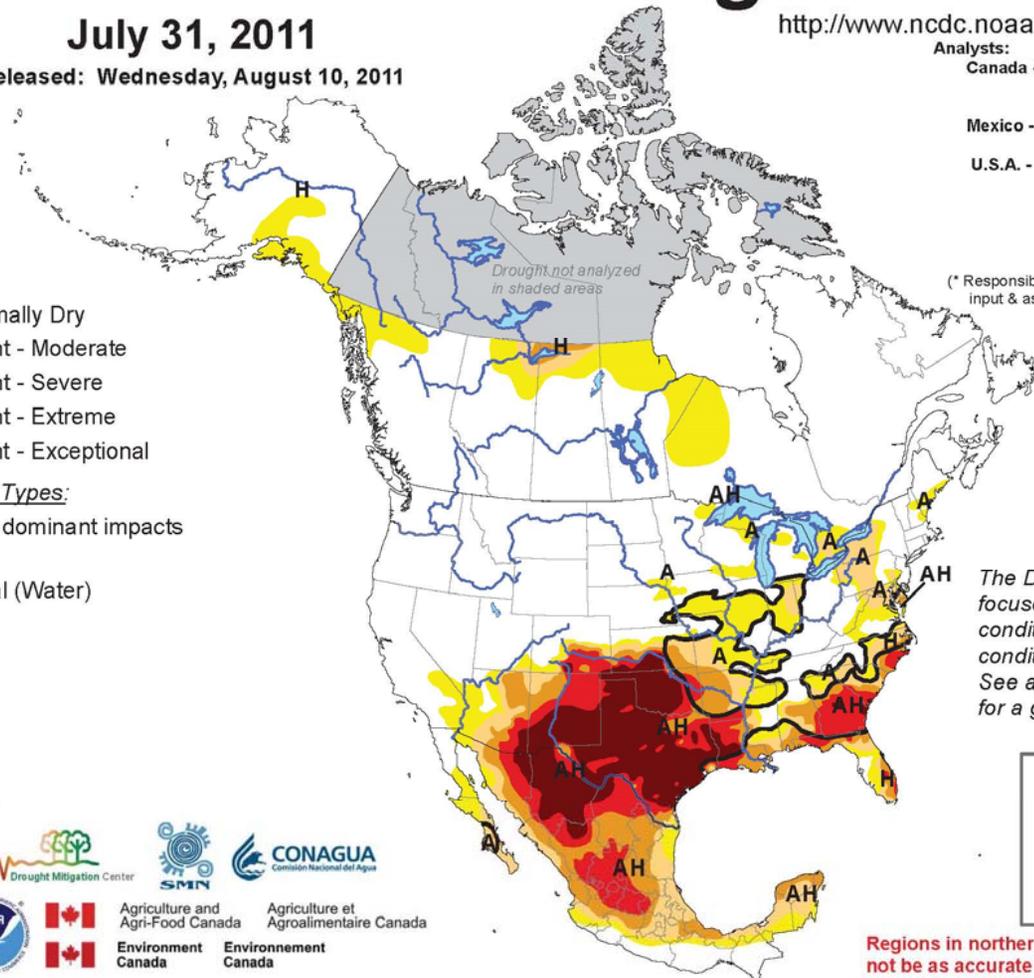
Canada - Trevor Hadwen  
Richard Rieger  
Dwayne Chobanik  
Mexico - Reynaldo Pascual\*  
Adelina Albanil\*  
U.S.A. - Brad Rippey

Intensity:

- D0 Abnormally Dry
- D1 Drought - Moderate
- D2 Drought - Severe
- D3 Drought - Extreme
- D4 Drought - Exceptional

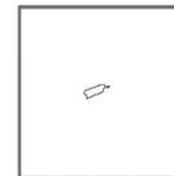
Drought Impact Types:

- Delineates dominant impacts
- A = Agriculture
- H = Hydrological (Water)



(\* Responsible for collecting analysts' input & assembling the NA-DM map)

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text for a general summary.



Regions in northern Canada may not be as accurate as other regions due to limited information.



# MINUTE 234 (1969)



**Per Minute 234, Mexico could transfer water at Amistad Dam**

- ◆ 1969 IBWC agreement
- ◆ Describes the means for Mexico to make up a deficiency after a 5-year cycle ends in deficit
  - ▶ 1/3 U.S. share from the 6 tributaries
  - ▶ Allot to the US part of Mexico's 2/3 share
  - ▶ Transfer of water from Mexican ownership to U.S. ownership at Falcon and Amistad reservoirs



# CURRENT CONDITIONS

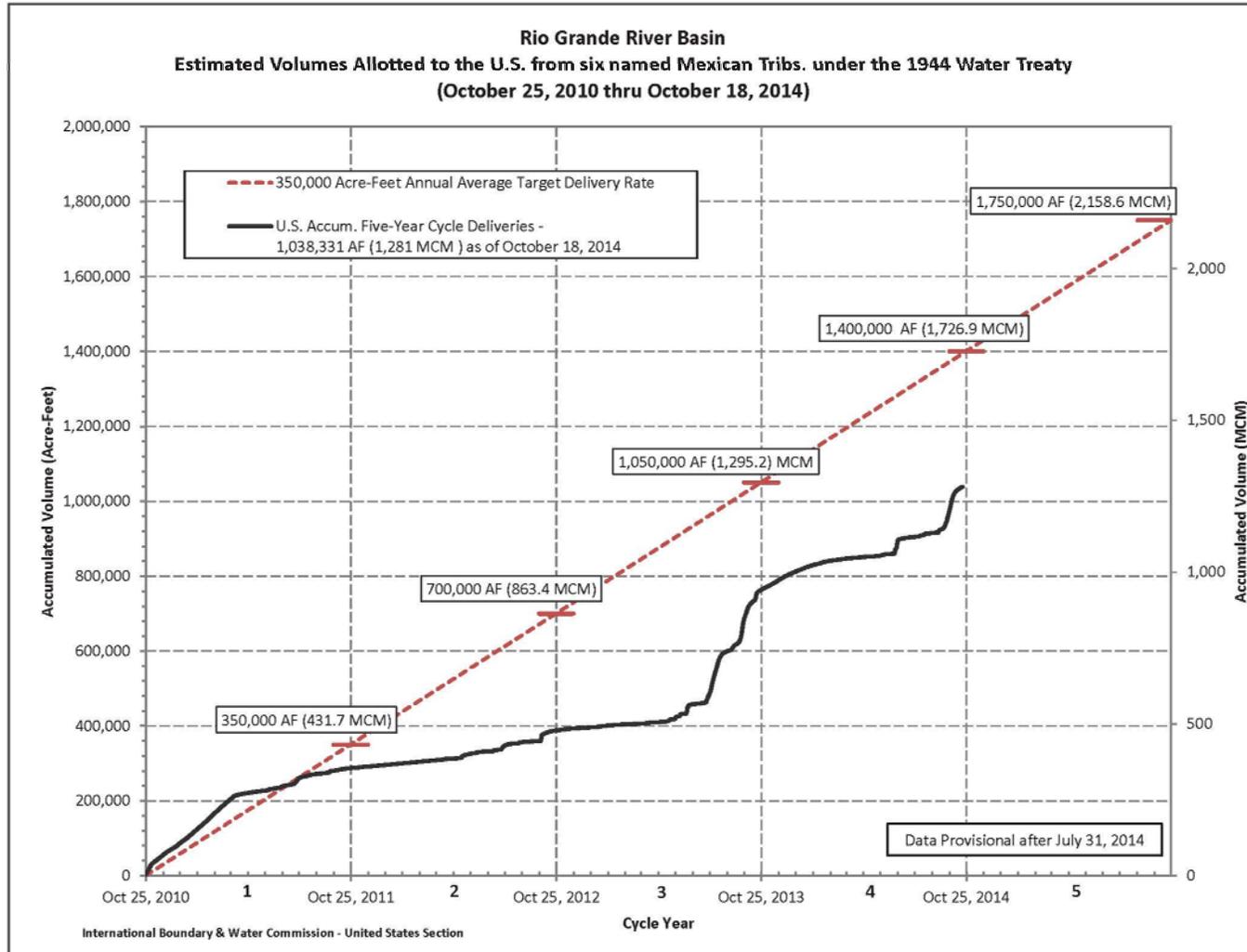
- ◆ Per preliminary data, deliveries are 1.09 maf
- ◆ Deliveries are 75% of full
- ◆ Deficit is approx. 300 kaf
- ◆ Deficit was 406 kaf at cycle halfway point
- ◆ Most deliveries occur during rainy season
- ◆ Deficit typically goes up in the winter/spring and down in the summer/fall



**Rio Grande near Brownsville-Matamoros**



# 1944 WATER TREATY



# CURRENT CONDITIONS

- ◆ Amistad
  - ▶ 50% of normal conservation capacity
  - ▶ Elevation 1085.07' (330.73)
  - ▶ Record low elevation in May 2013 of 1055.9' (321.8 m)
- ◆ Falcon – 29% of normal
- ◆ Combined storage at Amistad and Falcon
  - ▶ US – 44% (1.48 maf)
  - ▶ Mx – 35% (0.88 maf)



**Falcon Dam, 2010 flood release**



# CURRENT CONDITIONS

- ◆ Conchos Basin
  - ▶ 86% of normal conservation capacity
- ◆ Salado River/Carranza Dam – 56%
- ◆ San Rodrigo River/La Fragua Dam – 101%
- ◆ San Diego Basin – 93%
- ◆ Alamo Basin – 25%
- ◆ San Juan Basin - 110%



**Madero Dam in Conchos Basin  
2008 flood release**



# TREATY COMPLIANCE

- ◆ Regular meetings to address the deficit
- ◆ State of TX participates as technical advisor
- ◆ US requested inclusion of our water rights in Mx annual water allocations
- ◆ Naturalized flow approach would give equitable share to US
- ◆ USIBWC requests to participate in Mx water planning meetings



**Commission meeting at  
Amistad Dam**



# TREATY COMPLIANCE

- ◆ Full support of State Dept.
  - ▶ Involvement of Ambassador and Assistant Secretary
  - ▶ State Dept. participates regularly in meetings
  - ▶ USIBWC provides regular briefings to State
- ◆ Mexican participation
  - ▶ MxIBWC
  - ▶ Conagua
  - ▶ Ministry of Foreign Relations



Meeting in Mexico City



# TREATY COMPLIANCE

- ◆ Summer 2013
  - ▶ Mx agreed to prevent deficit from increasing in 2<sup>nd</sup> half of 2013
- ◆ Fall 2014
  - ▶ Mx agreed to deliver additional water from the Conchos River
  - ▶ Mx stated it would deliver at least the treaty minimum in years 4 & 5 – total of 700,000 a/f
  - ▶ With treaty minimum delivery, cycle deficit will be 286,791 a/f
  - ▶ Mx wants to avoid an “unmanageable” deficit
  - ▶ US continues to press Mx for additional scheduled deliveries

Fishing is good when the river is up



# TREATY COMPLIANCE

- ◆ Allow the US to utilize excess Mexican flows
  - ▶ Consistent with Article 9 of the 1944 Water Treaty
  - ▶ Water would otherwise flow to Gulf of Mexico unused
  - ▶ Flows increase during rainy season
  - ▶ Option only viable when US can put the water to beneficial use
  - ▶ 40 kaf potentially available from San Juan River if TX can use it



**Rio Grande at Gulf**



# MEXICAN RESERVOIRS

- ◆ Proposed Mexican reservoirs
  - ▶ MxIBWC provided information in 2013 on proposed dams in the Conchos River Basin
  - ▶ 4 were built or under construction totaling 9612 a/f capacity
  - ▶ 2 with total capacity of 6,290 a/f had not yet submitted permit requests
  - ▶ 1 with capacity of 49,000 a/f located in the southern portion of the basin has construction plans
  - ▶ Peguis Chico Dam
    - Downstream of existing dams
    - Preliminary studies performed
    - Tentative capacity of 243,200 a/f
    - MxIBWC informed USIBWC in 10/14 it is on hold indefinitely



# DATA

- ◆ Data available on USIBWC web page:
  - ▶ US and Mx reservoir storage and release
  - ▶ Stream gage data
  - ▶ Mx deliveries
  - ▶ National ownership of reservoir waters

**Brownsville Gaging Station**



# INTERNATIONAL BOUNDARY AND WATER COMMISSION

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