# INTERNATIONAL BOUNDARY AND WATER COMMISSION

# MINUTE 323 ON US-MEXICO COLORADO RIVER COOPERATION

Sally Spener, U.S. Secretary
October 25, 2017
Colorado River Citizens Forum



# 1944 WATER TREATY COLORADO RIVER

- U.S. to deliver to Mexico a volume of 1.5 maf/year
- When there are surplus waters, Mexico may receive an additional 200 kaf
- In extraordinary drought,
   Mexico reduced in
   proportion to U.S.
- U.S. has always met its delivery obligation

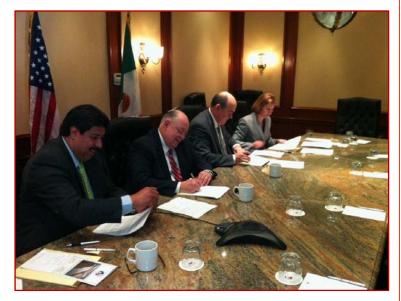


Mexico diverts most of its allotment at Morelos Dam.



#### **IBWC MINUTES**

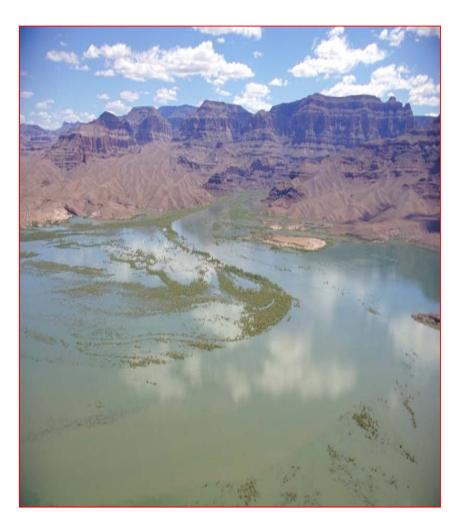
- Decisions of the Commission are recorded in the form of Minutes
- Minutes are binding agreements of the IBWC intended to implement treaty
- They take effect once approved by both nations' foreign affairs ministries
- 323 Minutes to date



IBWC Commissioners and Secretaries sign Min. 319



# COLORADO RIVER JOINT COOPERATIVE PROCESS





1999 Lake Mead 2006

### COLORADO RIVER JOINT COOPERATIVE PROCESS

- 7 U.S. Basin States & 2 federal governments asked IBWC to convene stakeholders.
- 4 Work Groups established in 2008
- Minute No. 317 (2010) formalized work groups and framework for US-Mx Cooperation.
- Minute No. 318 (2010) allowed Mx to store water in the US until it could fix earthquake damage

Damaged canal in Mexicali



### MINUTE 319 (2012)

- Signed Nov. 20, 2012
- 5-year agreement thru 2017
- 7 Sections
  - ► Extension of Minute 318
  - ► High reservoir water sharing
  - ► Low reservoir shortage sharing
  - ► Intentionally Created Mexican Allocation (ICMA)
  - ► Salinity Management
  - ► Water for Environment and ICMA/ICS exchange pilot
  - ▶ Projects



Minute 319 signing in San Diego, CA





Minute Negotiating Group Meeting in Mexico City

- Minute 319 ends 12/31/17
- Work began in 2015 on a new agreement based on Minute 319
- New Minute informed by Minute 319 and evolving basin conditions

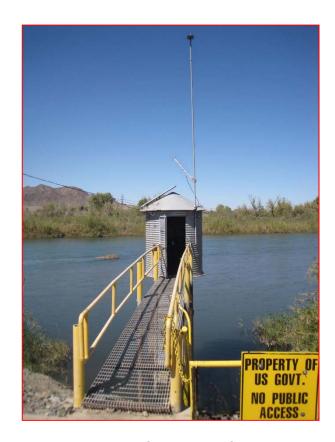




**MNG Members in Santa Fe** 

- Minute Negotiating Group (MNG) met monthly
- Meetings held in US and Mx
- Domestic consultations between binational meetings





**NIB Gaging Station** 

- Work Groups formed to assist MNG
  - ► Salinity Work Group
  - ► Projects Work Group
  - ► Environmental Work Group
  - ► Hydrology Work Group
- Minute 319 Work Groups also helped



- Signed 9/21/17 in Ciudad Juarez, Mexico
- DOS and SRE approval on 9/27/17
- Entry into Force Ceremony held 9/27/17 in Santa Fe, NM at Colorado River Symposium
- Ceremony attended by Deputy Secretary of Interior, Dept. of State



Min. 323 ceremony





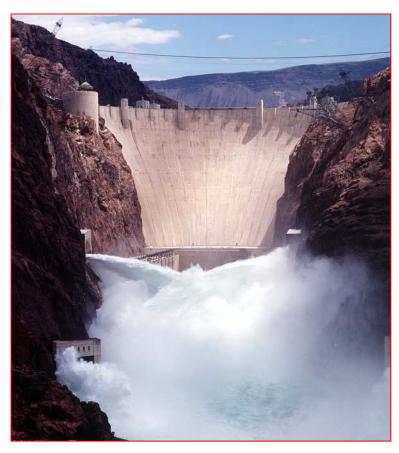
Under previous Minutes, Mexico deferred deliveries after an earthquake damaged canals.

#### Mexico's Water Reserve

- ► Allows Mexico to defer water delivery due to earthquakes, emergencies, or conservation
- ► Water available for subsequent delivery to Mexico
- ► Gives Mexico flexibility in water management
- ▶ Boosts Lake Mead elevation to benefit all users



#### WATER SHARING



**Hoover Dam** 

- Mexico interested in receiving additional water when surplus is available to U.S. users.
- Provides additional volumes to Mexico of 40 -200 kaf based on 4 high elevation tiers at Lake Mead.



#### SHORTAGE SHARING

- Principle that when one country is in shortage, the other country should be in shortage
- Annual reductions to Mexico of 50-125 kaf based on 3 low elevation tiers at Lake Mead
- Mexico may use its stored water to offset shortage, subject to limitations.



Lake Mead at Hoover Dam Dec. 2015



### SHORTAGE SHARING

- Mexican storage under Minutes 318 and 319 boosted Lake Mead elevation by 2-3 feet, helping to prevent mandatory cuts in the Lower Basin
- Hydrology Work Group
  - ► Technical experts from both countries
  - ▶ Data exchange, modeling, and analysis
  - Analyze the impact on reservoir levels from meeting system demands, drought, increased temperatures, etc.



**Colorado River at Southerly International Boundary** 



### **CONTINGENCY PLAN**

- Binational Water Scarcity Contingency Plan
  - ▶ Requires water savings earlier to shore up drought-affected reservoirs
  - ► Commitment to reduce water orders at certain reservoir elevations
  - ► Water savings could be delivered in the future when reservoirs refill
  - ▶ Based on proposed elements of U.S. Lower Basin Drought Contingency Plan

Lake Mead at Hoover Dam Dec. 2015





#### **SALINITY**



Morelos Dam where Mexico diverts most of its water

- Minute 242 (1973) requires salinity of deliveries to Mexico to be similar to water quality at Imperial Dam
- Applies a salinity formula that is fair to both countries
- US and Mexico will operate system to minimize salinity impacts of Min. 319 actions
- Improved salinity monitoring



#### **FLOW VARIABILITY**



**Colorado River near Northerly International Boundary** 

- Treaty provides for a monthly delivery schedule to Mx
- Mx users concerned about daily flow variability of deliveries
- Min. 323 considers potential regulating reservoirs
- Establishes water order and delivery targets to minimize daily variability



### **ENVIRONMENT**



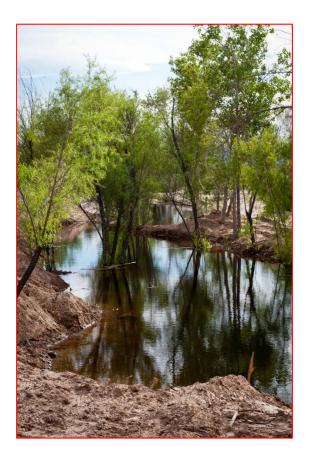
**Laguna Grande Restoration Site** 

- Generates water for the environment
- 210 kaf+ of water for environment
  - ► U.S. investment in Mexico to cover 1/3 of this volume
  - ► Mexico and NGOs cover the rest
  - ► Focus on water for habitat restoration sites



### **ENVIRONMENT**





2014 pulse flow at Laguna Grande Restoration Site



#### **PROJECTS**

- \$31.5 M from US for projects in Mexico
- Mexico derives long-term benefits from waters conserved from U.S. investment
- 109 kaf for water agencies, 70 kaf for environment, and 50 kaf for system storage
- Work Group to explore binational connection for All-American Canal



U.S. entities to fund projects like canal lining.



# BENEFITS TO US OF MINUTES 319 AND 323



**Colorado River at Morelos Dam** 

- Provides certainty for water planning, esp. in shortage
- Water to US in exchange for investment in Mexico
- Environmental benefits of shared ecosystem
- Storing Mexico's water in US boosts Lake Mead elevation
- Cooperation benefits all parties

### MINUTE 323 2018-2026



**Binational Work Group Meeting** 

- Work Groups to continue to meet to:
  - Analyze basin conditions and refine joint forecasting
  - ► Identify means to better control salinity or flow variability
  - ► Work on habitat restoration
  - Consider new projects
- Work on the next agreement for 2027+



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