

RESTORATION OF THE COLORADO RIVER AND ITS DELTA

MINUTE 319



Dr. Francisco Zamora



THE NEED FOR ECOLOGICAL RESTORATION



Colorado River: 1940s

Courtesy of IBWC



Colorado River: Today



Looking upstream at Morelos Dam: The last dam on the Colorado River



Morelos Dam: Looking downstream



SOUTHERLY INTERNATIONAL BORDER
23 miles downstream from Morelos Dam: dry river bed



LOWER COLORADO RIVER IN MEXICO

About 15 miles from its mouth

THE COLORADO RIVER BASIN: 7 states in the US and 2 in Mexico

- 35 million people
- 4 million acres of irrigated farmland
- Most heavily regulated river system in the world



OTHER RESTORATION EFFORTS ON THE U.S. SIDE

The Lower Colorado River Multi-Species Conservation Program (LCR MSCP)

- **Created to balance the use of the Colorado River water resources with the conservation of native species and their habitats.**
- **The program works toward the recovery of species currently listed under the Endangered Species Act (ESA). It also reduces the likelihood of additional species listings.**
- **Implemented over a 50-year period**
- **The program does not include areas in Mexico**

MINUTE 319

INTERNATIONAL BOUNDARY AND WATER COMMISSION
UNITED STATES AND MEXICO.

Coronado, California
November 20, 2012

MINUTE NO. 319

**INTERIM INTERNATIONAL COOPERATIVE MEASURES
IN THE COLORADO RIVER BASIN THROUGH 2017 AND
EXTENSION OF MINUTE 318 COOPERATIVE MEASURES TO ADDRESS THE
CONTINUED EFFECTS OF THE APRIL 2010 EARTHQUAKE IN THE
MEXICALI VALLEY, BAJA CALIFORNIA**

The Commissioners met in the City of Coronado, California on November 20, 2012 at 1:00 p.m., in order to consider interim international joint cooperative measures to address water management in the Colorado River Basin.

I. BACKGROUND

The Commissioners referred to the interest of both countries in identifying

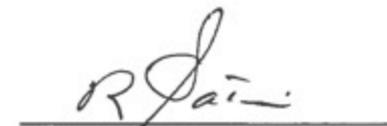
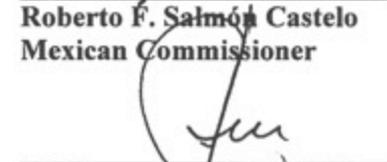
The meeting was adjourned.



Edward Drusina
U.S. Commissioner



Sally E. Spener
U.S. Section Secretary


Roberto F. Salomón Castelo
Mexican Commissioner
José de Jesús Luévano Grano
Mexican Section Secretary

the mechanism described in Resolution 5 above.

This Minute do not affect the interpretation or application of Article 10(b) of the 1944 Water Treaty, including allocations allotted to Mexico under Article 10(a) of said treaty.

Measures undertaken pursuant to this Minute shall be subject to the laws, resources, and corresponding personnel, as well as to regulations in each country.

Measures shall enter into force upon notification of approval by the United States of America and the Government of the United States through the respective Section of the Commission.

BINATIONAL NEGOTIATIONS: MINUTE 319



- U.S. and Mexican water agencies and NGOs established IBWC “Joint Colorado River Cooperative Process” to improve binational water management
 - Negotiated 3 new international agreements in 2009 & 2010 (Minutes 316, 317, and 318)



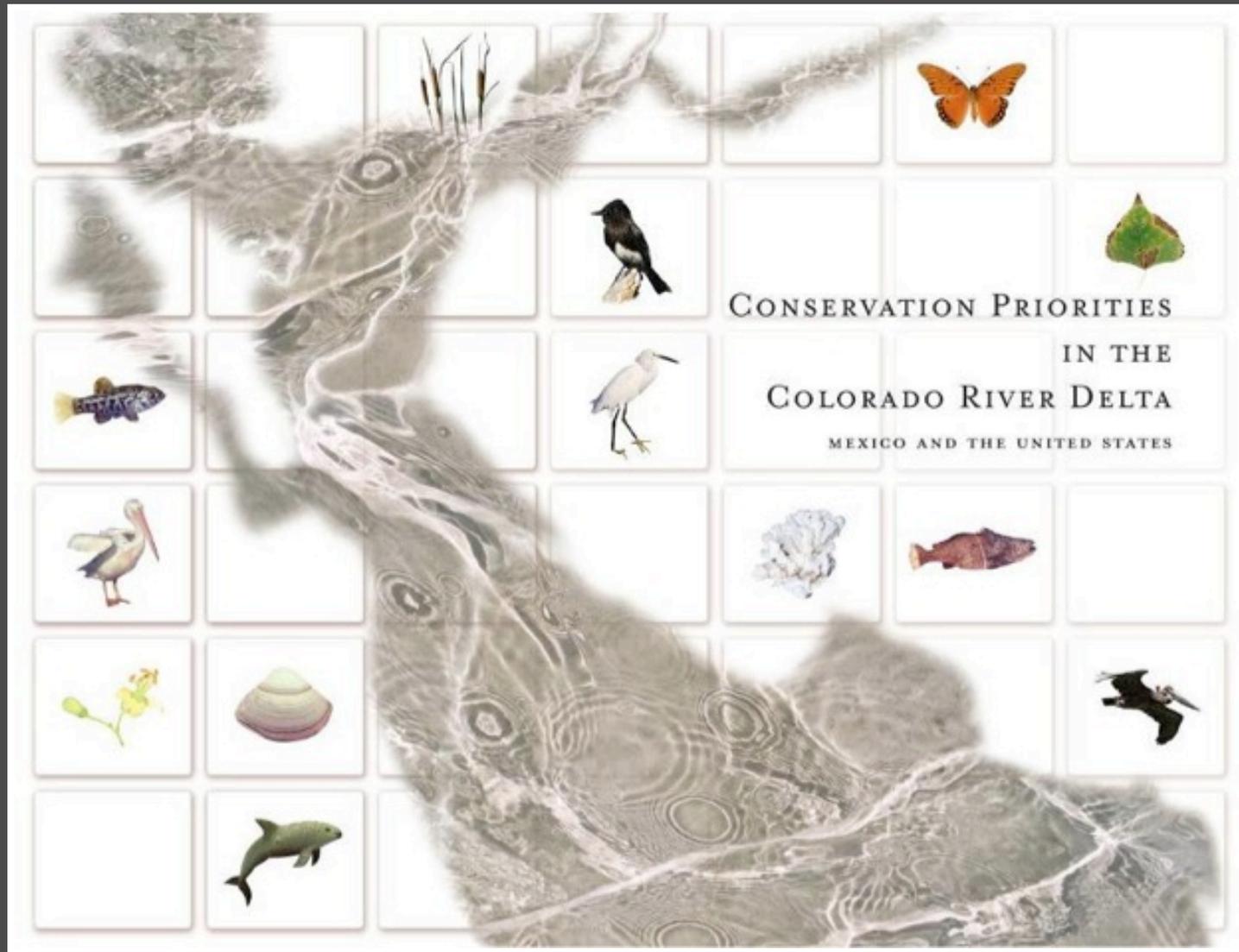
BINATIONAL NEGOTIATIONS: MINUTE 319

- Minute 319 most comprehensive water agreement between U.S. and Mexico since Treaty of 1944:
 - First of its kind agreement among more than 3,000 international water agreements
 - Sharing of shortage risks and surplus benefits
 - Joint management of reservoirs & use of U.S. reservoirs for Mexican storage
 - Binational investments in agricultural conservation, desalination, and water exchanges
 - Binational Delta restoration and flow program



MINUTE 319 Binational restoration and flow program:

A decade of research and restoration served as foundation for this program



MAP OF THE POSSIBLE



MAJOR COMPONENTS OF MINUTE 319
RESTORATION AND FLOW PROGRAM:

PULSE FLOW
105,392 AF



BASE FLOW
52,696 AF



RESTORATION



MONITORING

PULSE FLOW AT MORELOS DAM DAY 5



PULSE FLOW PROGRESS THROUGH WEEK 6



RESTORATION SITES



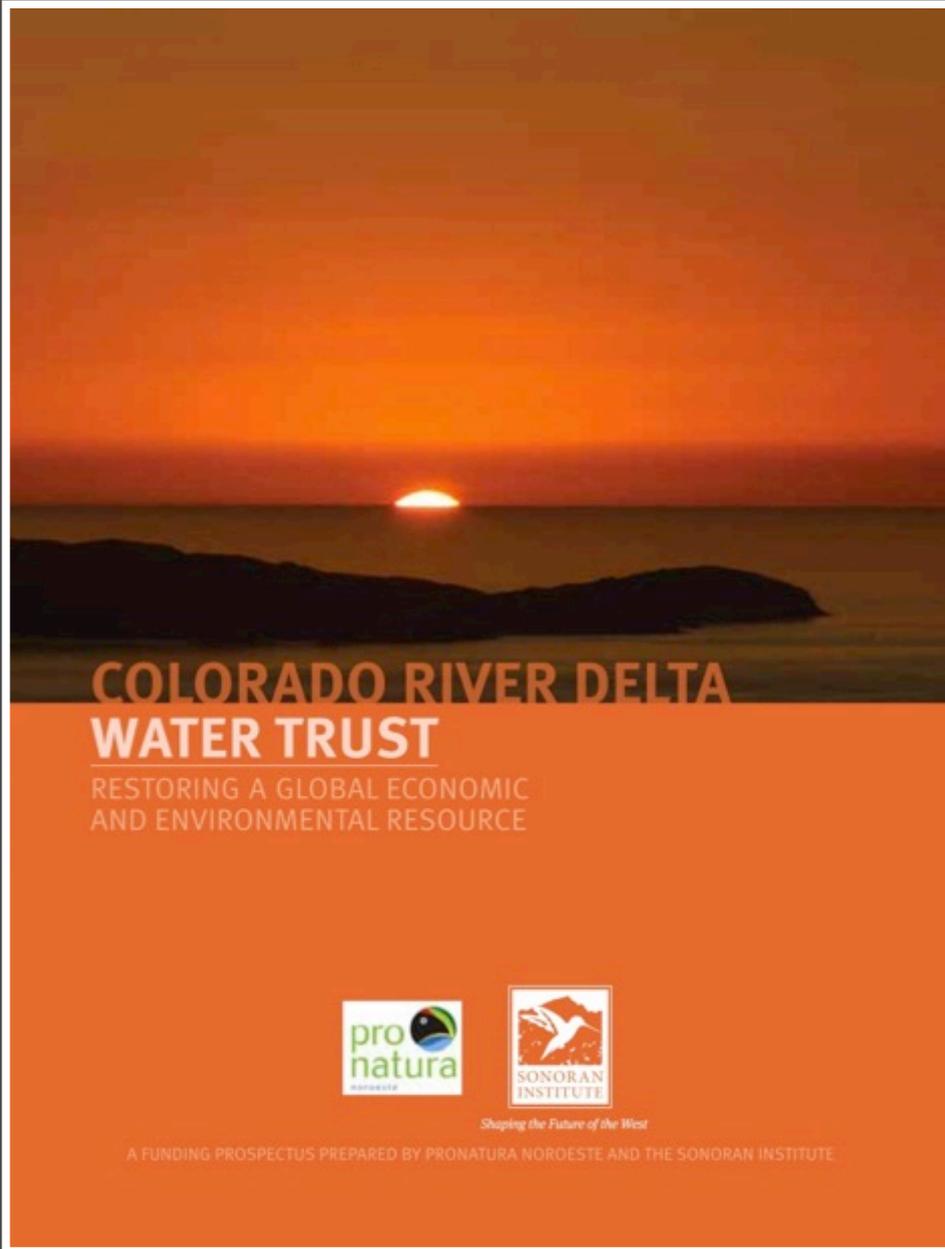
MIGUEL
ALEMAN



LAGUNA GRANDE



LIMITROPHE AREA



Approaches to secure water:

1. Acquire water rights through the Colorado River Delta Water Trust to meet Minute 319 obligations
2. Water re-use: Las Arenitas Treatment Wetland for areas not included in Minute 319