

# The Binational Effort to Restore the Colorado River Delta



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**RECLAMATION**  
*Managing Water in the West*



**CONAGUA**  
COMISIÓN NACIONAL DEL AGUA

 **USGS**  
*science for a changing world*



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**ALIANZA REVIVE EL RÍO COLORADO**

**RAISE THE RIVER**  
RECONNECT THE COLORADO

 **Audubon**



**pro natura**  
noroeste

**The Nature Conservancy**



 **RESTAUREMOS EL COLORADO**

# U.S.-Mexico Water Treaty of 1944

Governs trans-boundary water of the Colorado, Rio Grande and Tijuana Rivers.

Established the International Boundary and Water Commission.

Allocates 1.5 million acre-feet per year of Colorado River water to Mexico.

In the event of “extraordinary drought”... shall be reduced “... in same proportion as consumptive uses in the United States are reduced”.

Technical clarifications and modifications to the Treaty are called “**Minutes**”



SIGNING OF THE 1944 WATER TREATY at Washington, D. C. on February 3, 1944. At end of table, seated, is United States Secretary of State Cordell Hull signing the document, and to his right, also seated, is Mexican Foreign Relations Secretary F. Castillo Najera. Seated to Secretary Hull's left are United States Ambassador George S. Messersmith (nearest Hull) and United States Commissioner, IBWC, Lawrence M. Lawson. To Secretary Najera's right is Rafael Fernandez McGregor, Mexican Commissioner, IBWC. Standing to the left of the door is the U. S. Section Legal Counsel Frank B. Clayton.

## OWGs in 1944

TREATY SERIES 994

UTILIZATION OF WATERS  
OF THE COLORADO AND TIJUANA RIVERS  
AND OF THE RIO GRANDE

+

TREATY  
BETWEEN THE UNITED STATES OF AMERICA  
AND MEXICO

Signed at Washington February 3, 1944.

AND  
PROTOCOL

Signed at Washington November 14, 1944.

Ratification advised by the Senate of the United States of America  
April 18, 1945, subject to certain understandings.  
Ratified by the President of the United States of America November  
1, 1945, subject to said understandings.  
Ratified by Mexico October 16, 1945.  
Ratifications exchanged at Washington November 8, 1945.  
Proclaimed by the President of the United States of America  
November 27, 1945, subject to said understandings.  
Effective November 8, 1945.



UNITED STATES  
GOVERNMENT PRINTING OFFICE  
WASHINGTON : 1946

# Minute by Minute: Progress in binational water management

U.S.-Mexico Water Treaty of 1944

**2012 Minute 319** A five-year Minute, 2012-2016

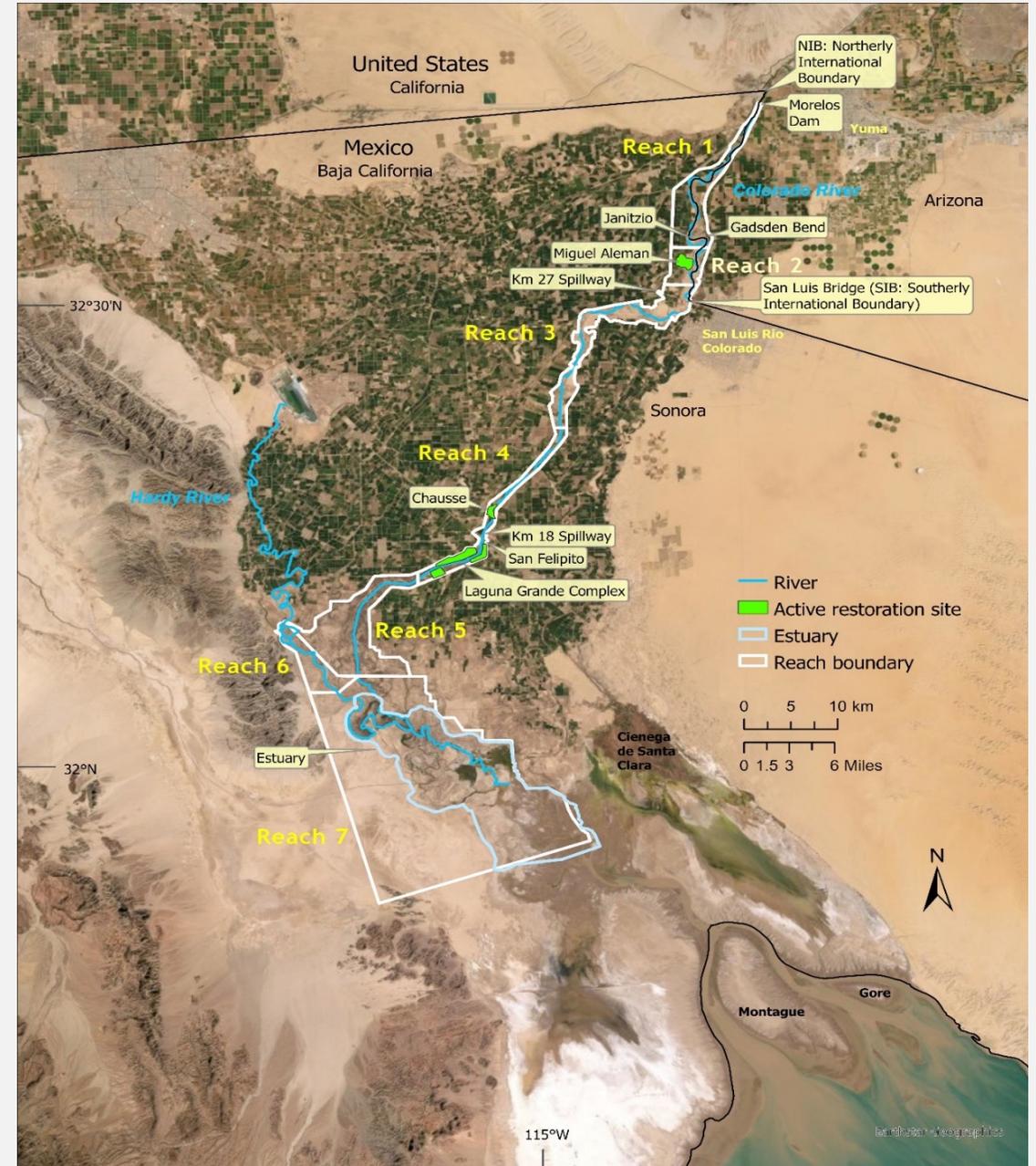
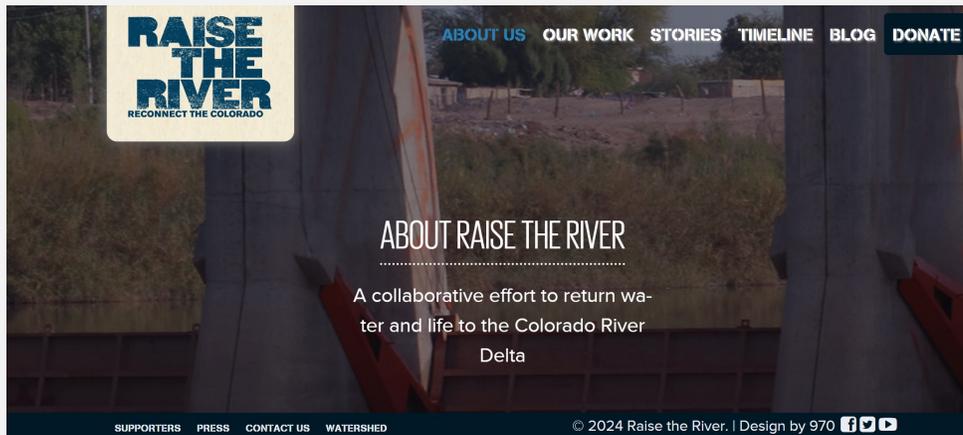
**2017 Minute 323** A nine-year Minute: 2017-2026



- Mexico can store water in U.S.
- U.S. and Mexico share future surpluses and shortages
- U.S. pays for water-saving infrastructure in Mexico; gets water in return
- **Environmental flows to delta** Mexico/US/NGOs share equally  
**Funding for restoration : \$3M each**  
**Funding for monitoring & research: \$3M each**

# Restoration sites along the river

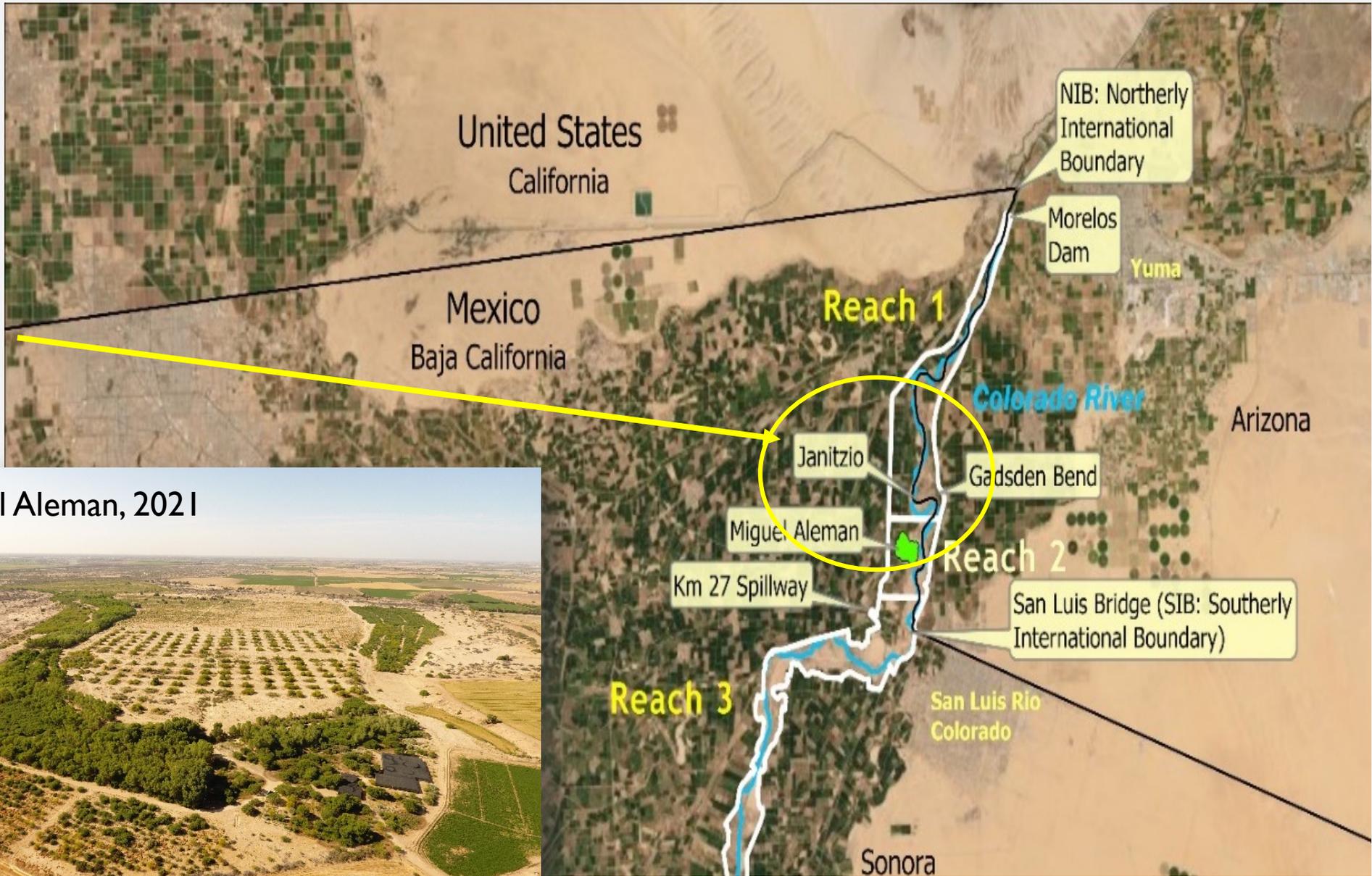
NGOs purchase or lease water from farmers in the Mexicali Valley



<https://raisetheriver.org/>



# Miguel Aleman and Janitzio sites



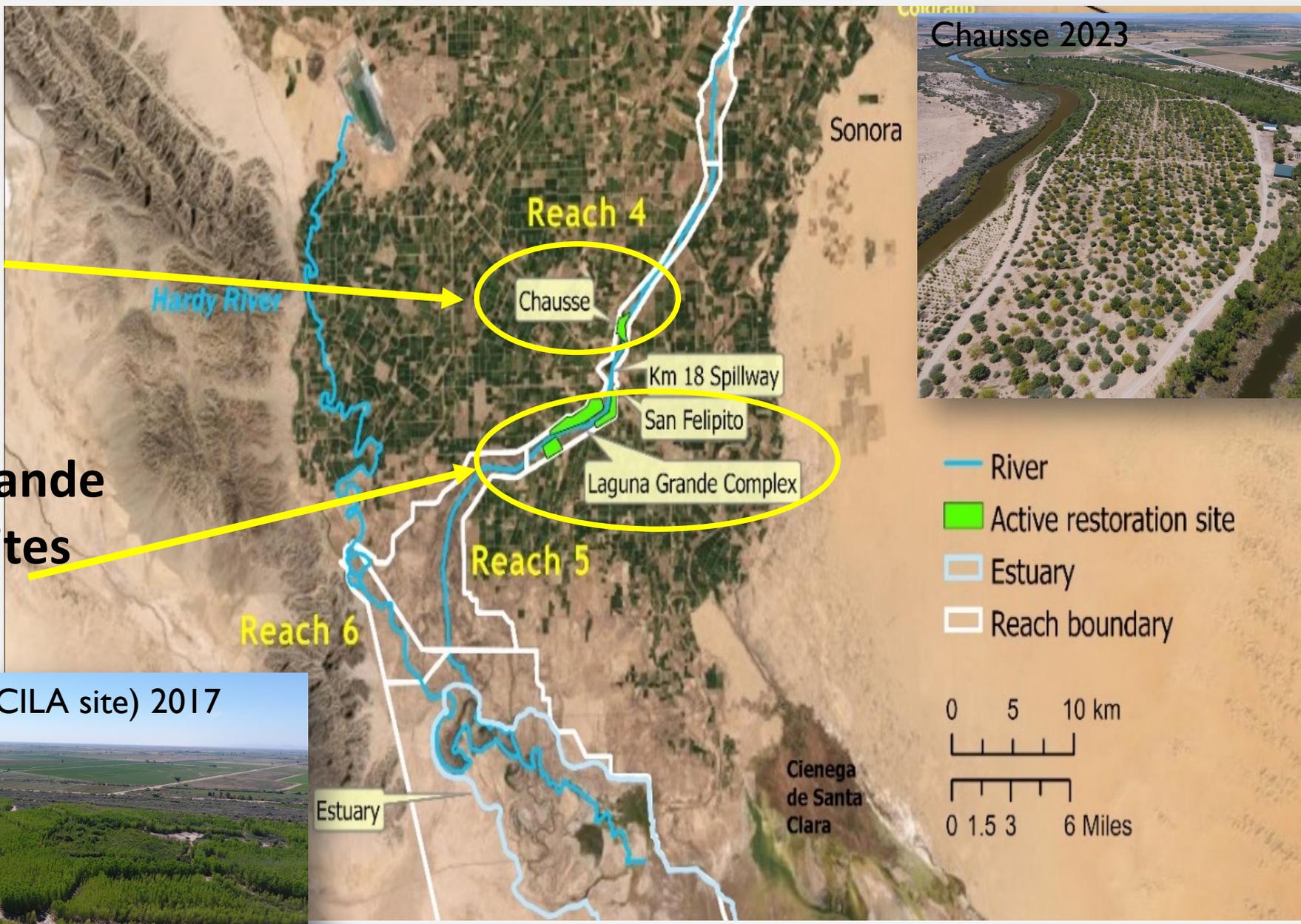
Miguel Aleman, 2021



**RESTAUREMOS  
EL COLORADO**

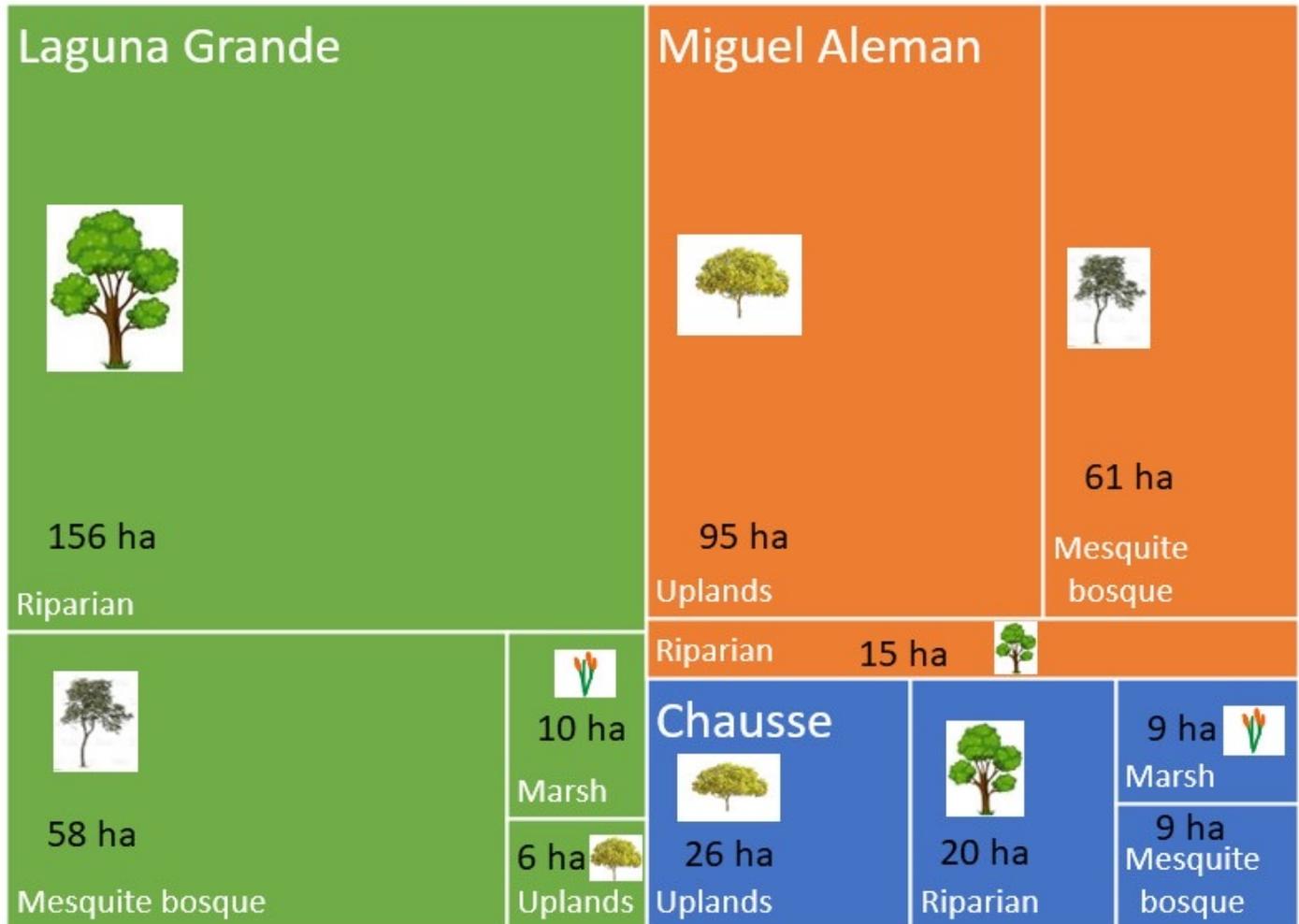
## Chausse and Don Parna sites

## Laguna Grande complex sites



# Habitats restored during Minute 319 and 323

■ Chausse ■ Laguna Grande ■ Miguel Aleman



# Minute 319 and 323 binational agreements between the U.S. and Mexico to allocate water for the environment

## 2014 Pulse flow



- March 23-May 18 (57 days)
- Inundated 7 reaches
- 130 mcm
- 65 mcm base flows
- 195 mcm total

## 2021 and 2022 In-channel flows



- May-October 2021 (167 days) 35.3 mcm and May-September (143 days), 36 mcm
- Inundated from Reach 4 to Reach 7
- 259 mcm total

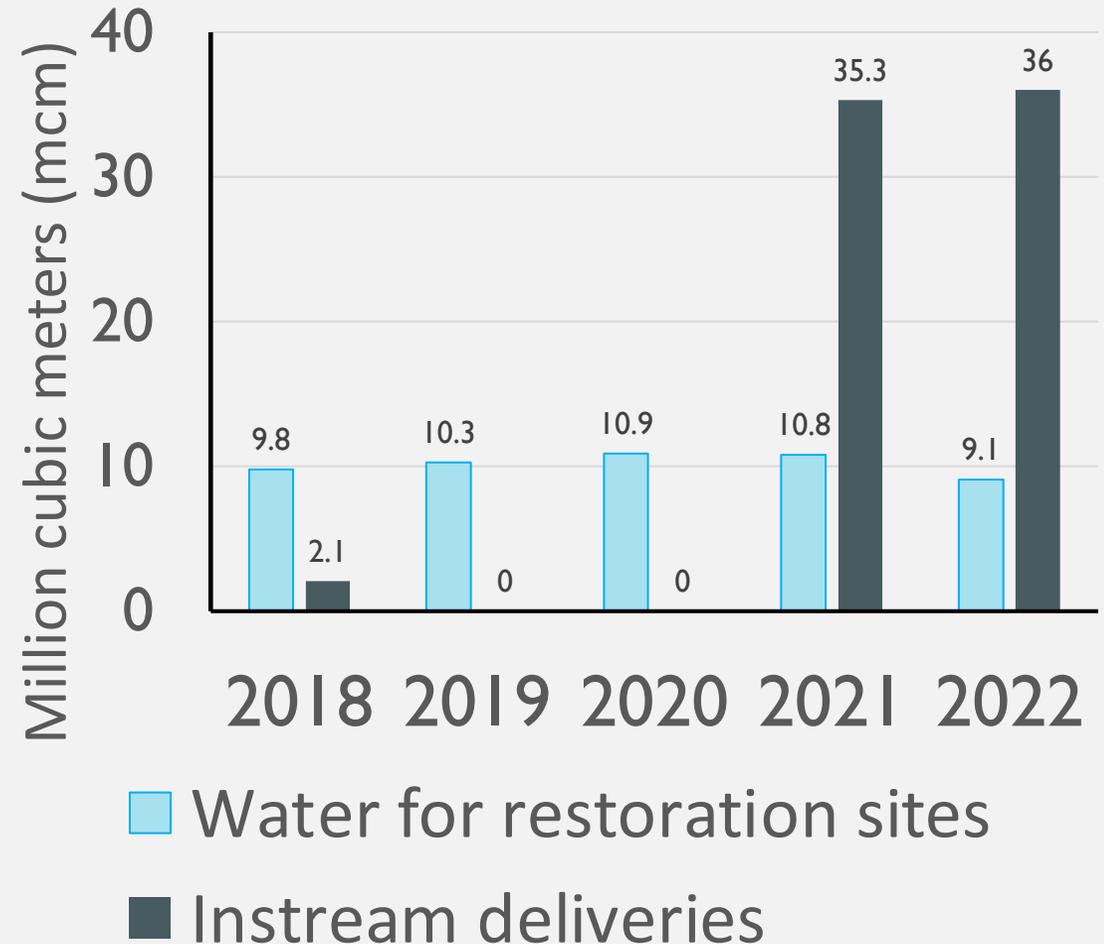
# Water deliveries

## Scheduled water deliveries to restoration sites objectives

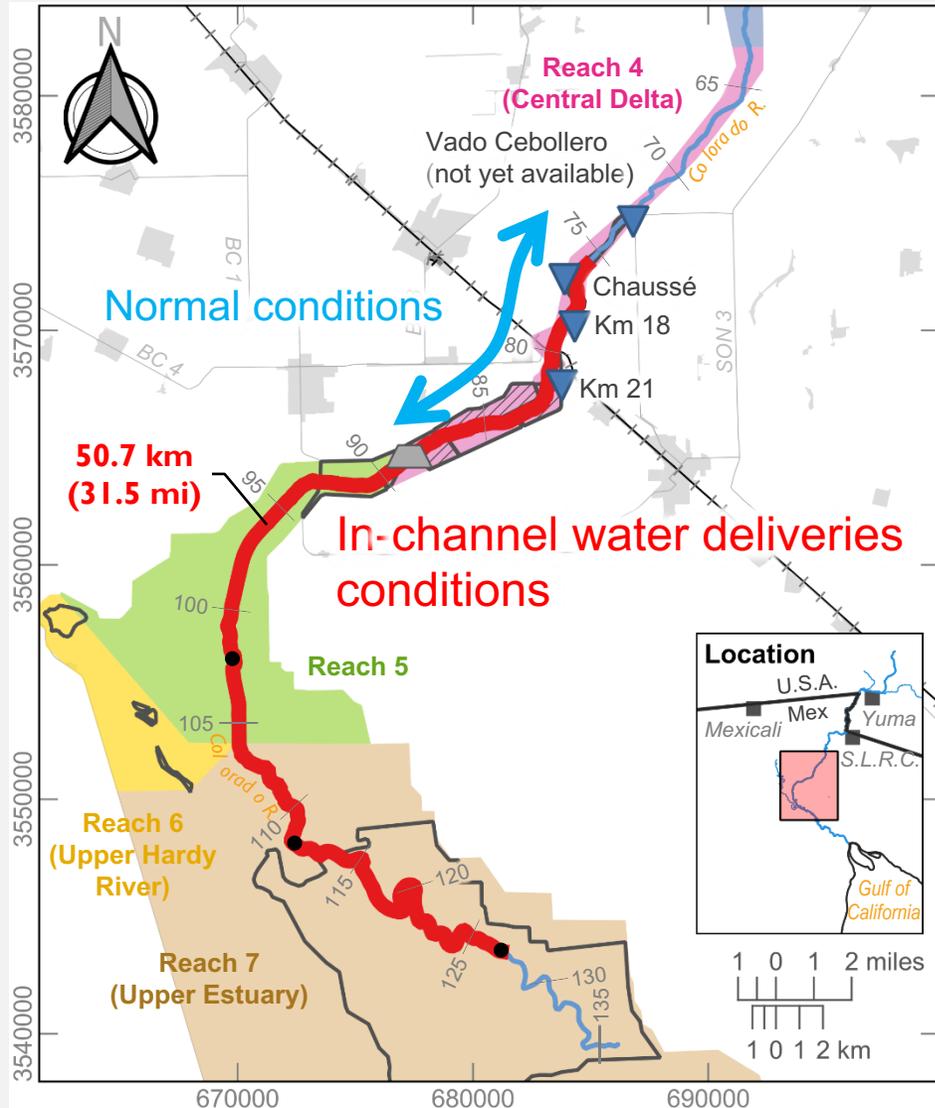
- Support restoration activities from creation of new habitats to maintenance.
- Control soil salinity.
- Creation of recreation opportunities .
- Support wildlife.

## In-channel water deliveries objectives

- Create longitudinal connectivity.
- Promote recruitment.
- Maintain, enhance remnant riparian habitat.
- Manage soil and groundwater salinity.
- Increase freshwater flow to estuary.
- Aquifer recharge.



# In-channel water discharges in 2021 and 2022, 51 km/ 32 miles of free-flowing Colorado River



# Recreation opportunities in Vado Carranza during 2021 water deliveries



# Concluding remarks

- Ten years of efforts have been successful. Minute 323 has showed how governments and stakeholders with diverse interests can work together to enhance riparian ecosystems and create social benefits.
  - Continuation and expansion of restoration efforts depend on funding, the availability of water and a new binational agreement.
  - Community participation has been very relevant as well as creating a connection with the river.
- Some challenges include:**
- To apply the lessons learned in the planning of environmental flows and maximize their ecological and social benefits.
  - Use monitoring and research results to apply adaptive management in restoration sites in real time.
  - Implement restoration in socially complex areas in the borderlands.
  - Adopt new strategies for the efficient use of water in the face of climate change and Colorado River water shortages.

# Thanks!

