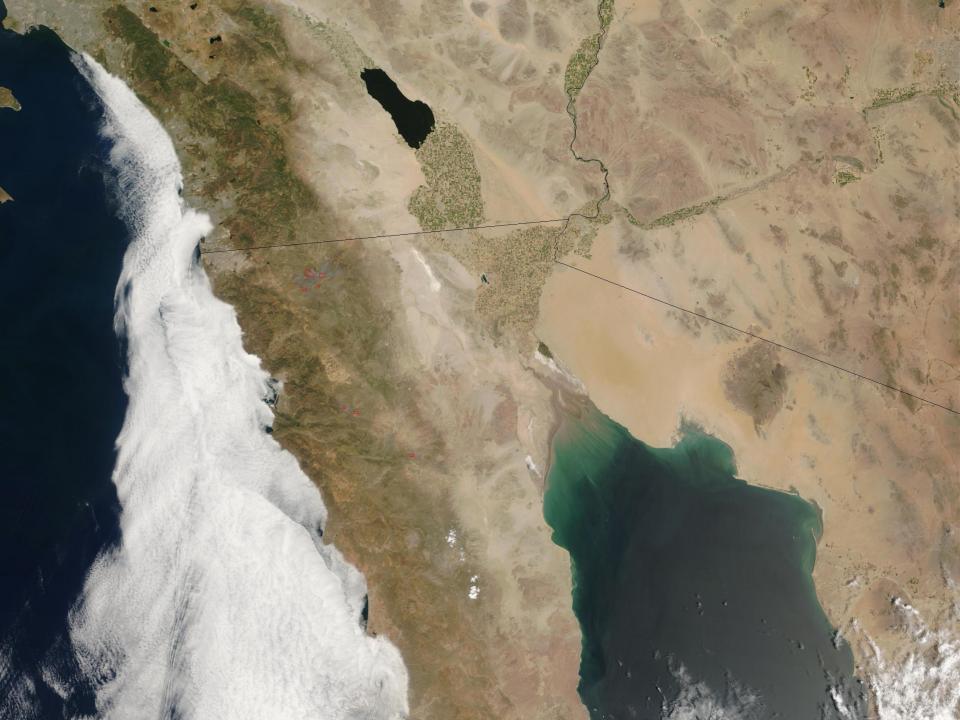


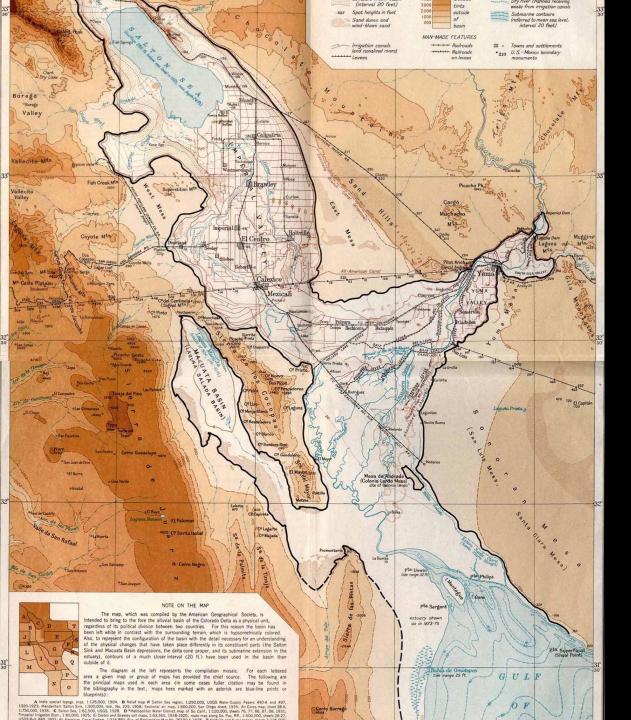
Restoration and Resiliency in the Colorado River Delta

### **Osvel Hinojosa-Huerta**

## Pronatura Noroeste





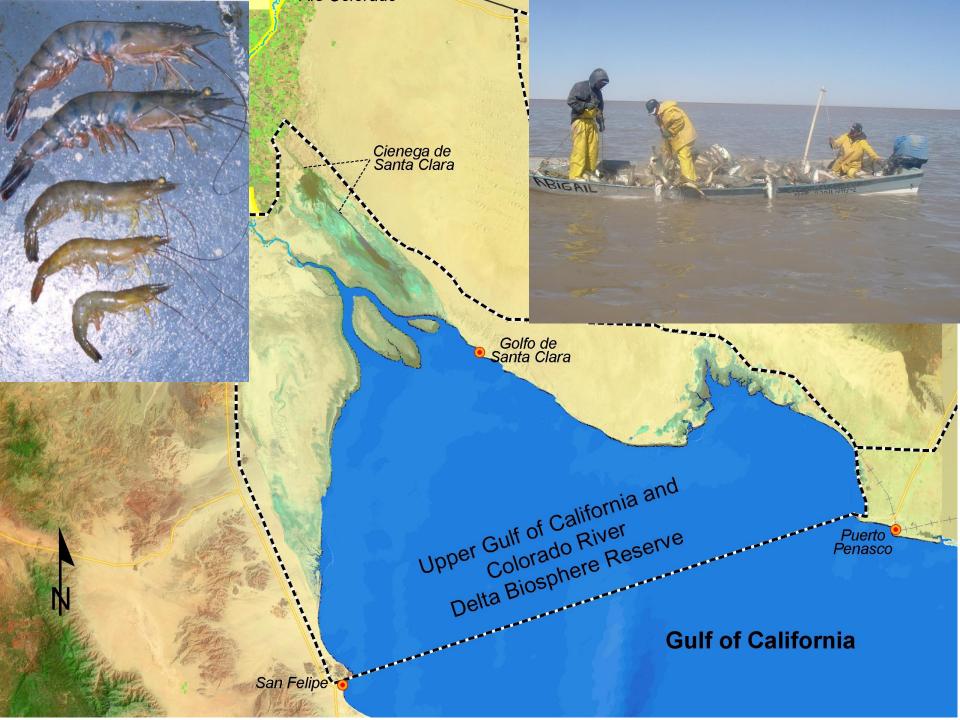


Colorado River Delta 400,000 Ha 19,000 Mm<sup>3</sup> of water per year to the Gulf of California

River influence: 65 km into the sea

Extensive estuary (500,000 Ha)

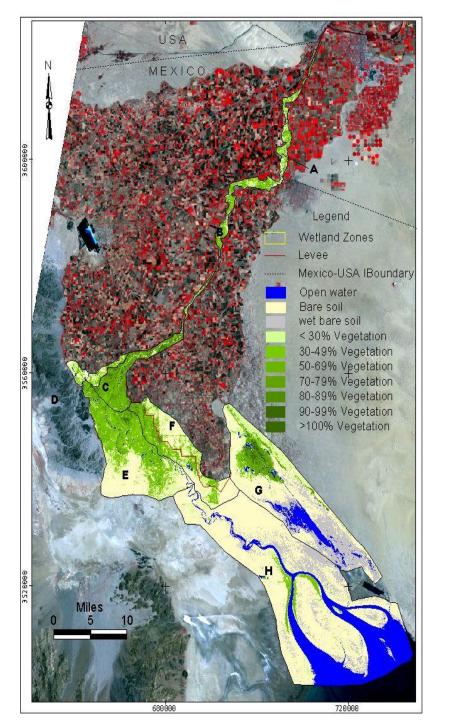


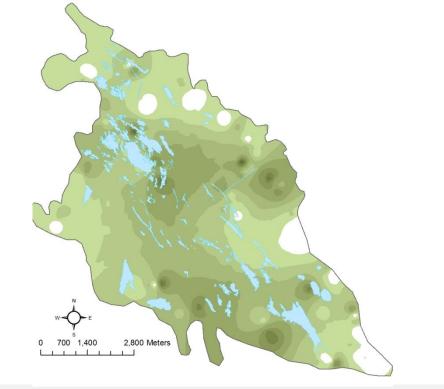


# Restoration in the Colorado River Delta

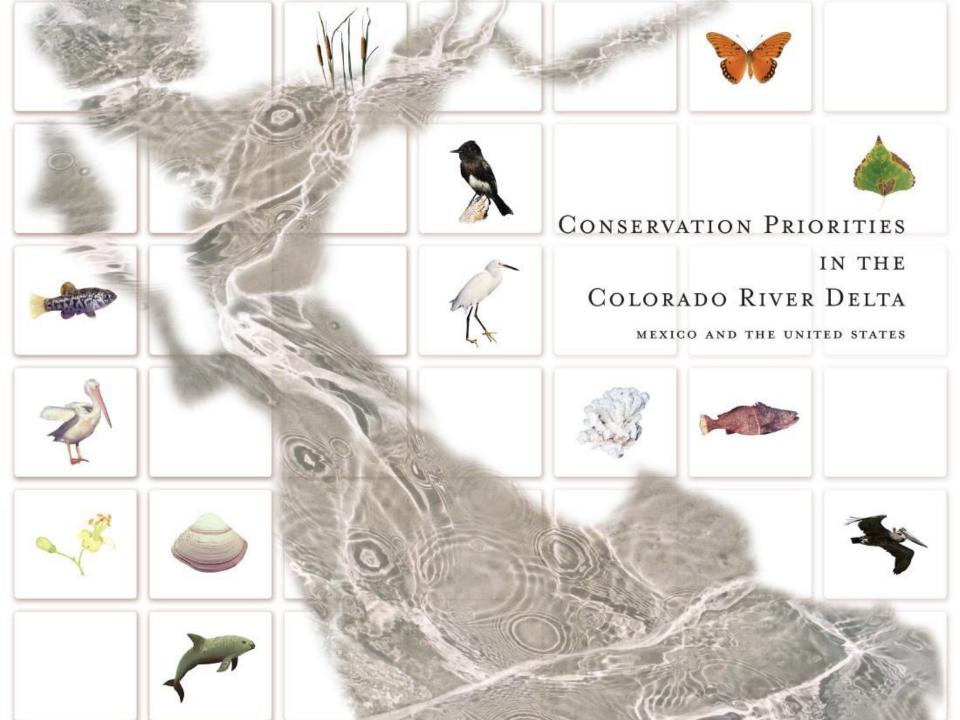
- Research, planning and identification of needs for the environment
- Public policy and outreach
- Implementation of tools











Initiative for the Restoration of the Colorado River Delta

Improve and maintain environmental conditions at priority sites

- Biodiversity
- Community livelihoods



# **Key strategies**

Outreach and community involvement

Binational negotiations

Water for the environment

Protection of key sites

Restoration

THE UNIVERSITY OF ARIZONA. SCHOOL OF RENEWABLE NATURAL RESOURCES College of Agriculture and Life Sciences















ALTO GOLFO DE CALIFORNIA Y DELTA DEL RÍO COLORADO





CIAD



**AEURHYC A.C** 





Finding the ways that work





SECRETARÍA DE MEDIO AMBIENTE Y RECURSOS NATURALES



# Public Policy and Binational Negotiations

 Creation of the Biosphere Reserve and Ramsar Sites

• Minute 306 of the International Water Treaty: binational collaboration for the restoration of the delta.

 Integration of the Binational Colorado River Cooperative Process within the framework of CILA/IBWC

- Environment
- Participation of multiple stakeholders

Water Allocation:

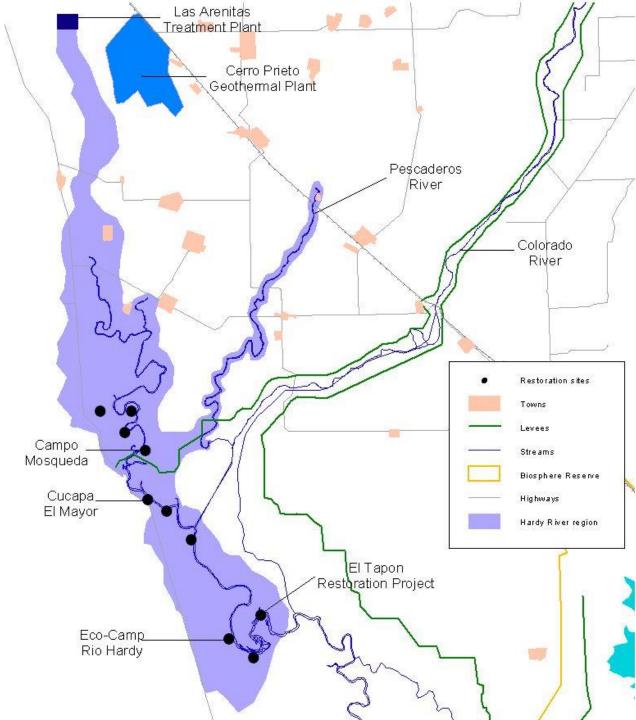
- Voluntary, marketbased strategies
- Acquisition of water rights in the Mexicali Valley
- Water Trust for the Restoration of the Colorado River Delta



Las Arenitas Wastewater Treatment Plant

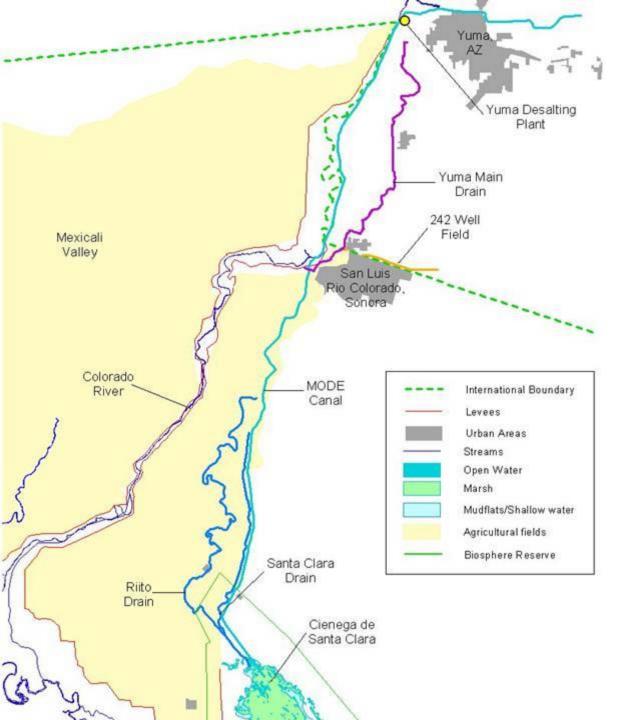
30% of the effluent guaranteed for instream flows in the Hardy River (18 K afy)

Duplicates the flow in the river







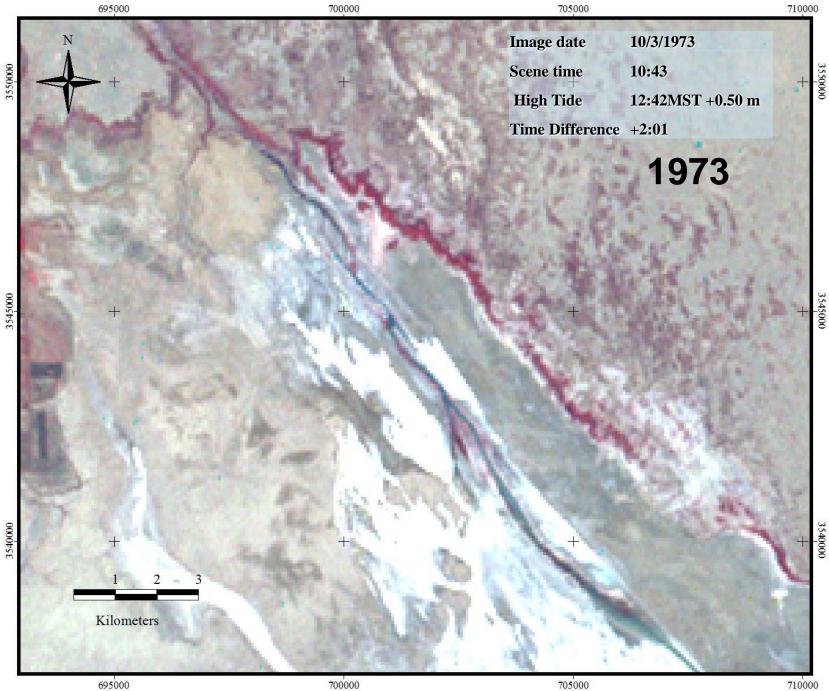


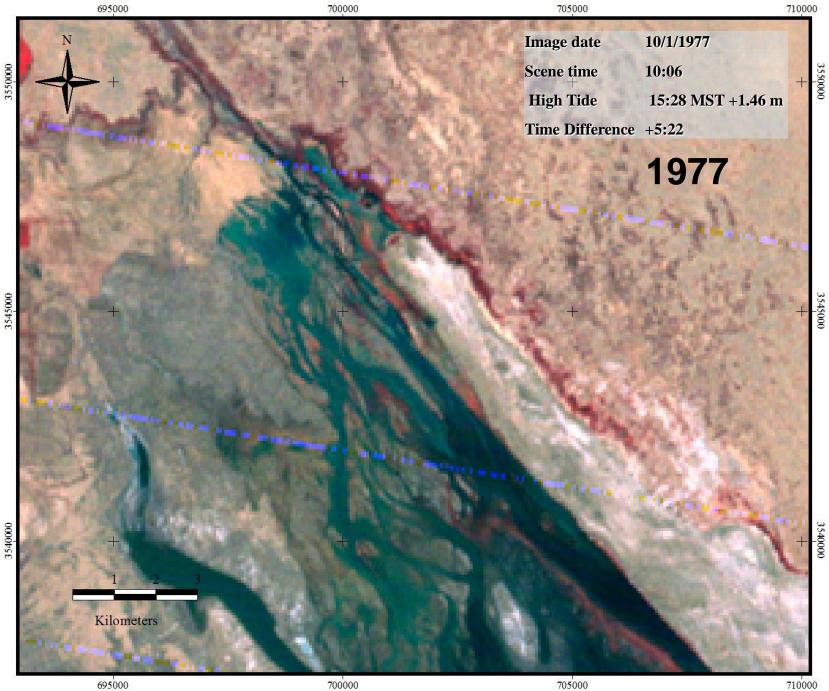
Cienega de Santa Clara: 40,000 acres

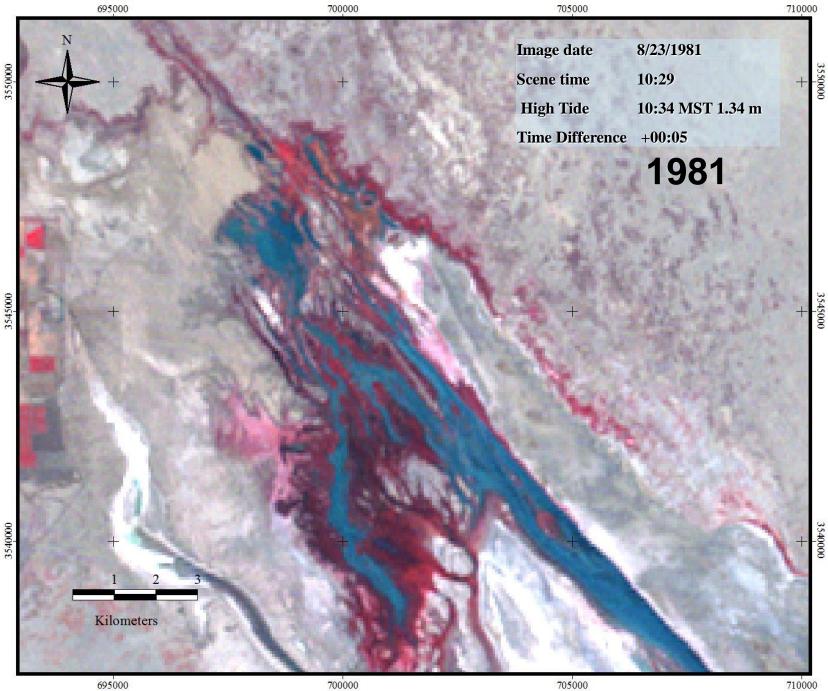
90% of its water is agricultural drainage from the Welton and Mohawk valleys in Arizona

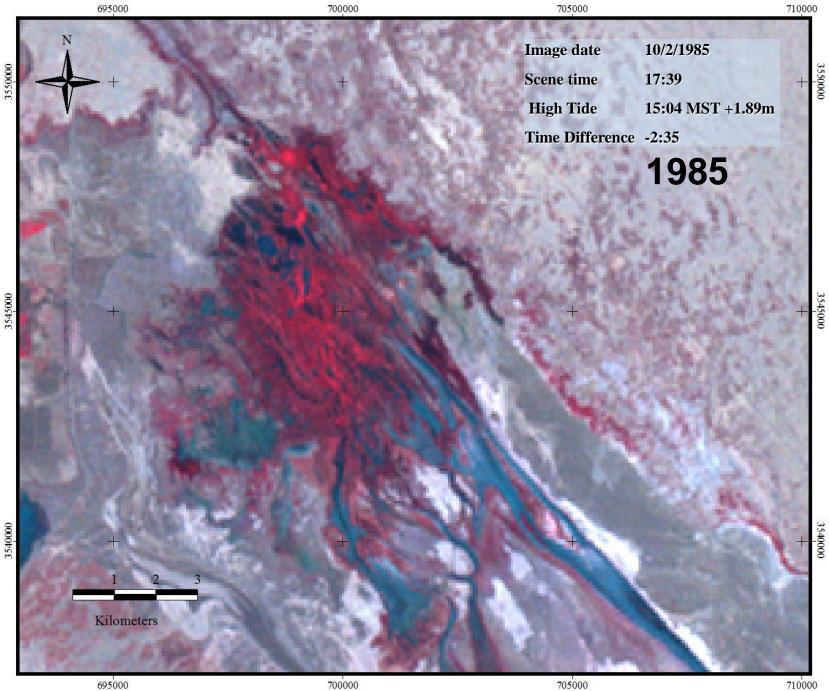
#### **MODE** Canal

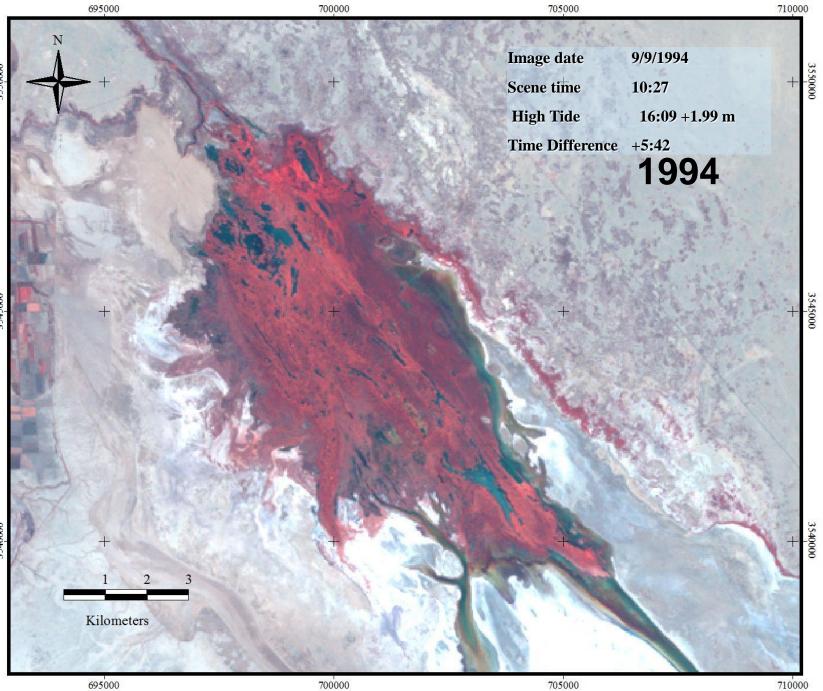
This same water has being targeted to be used by the Yuma Desalting Plant in Arizona

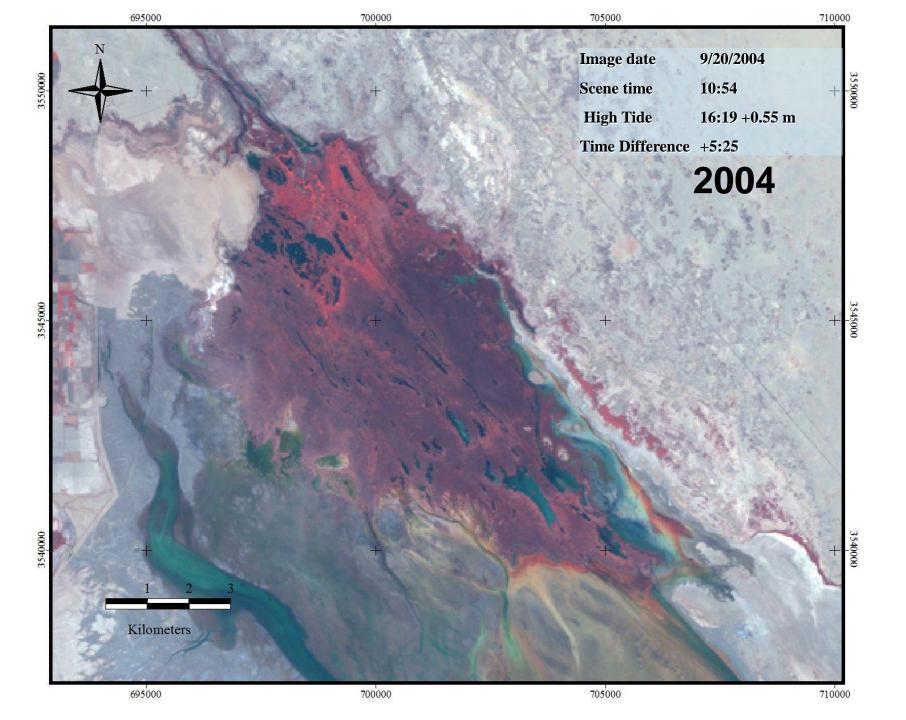


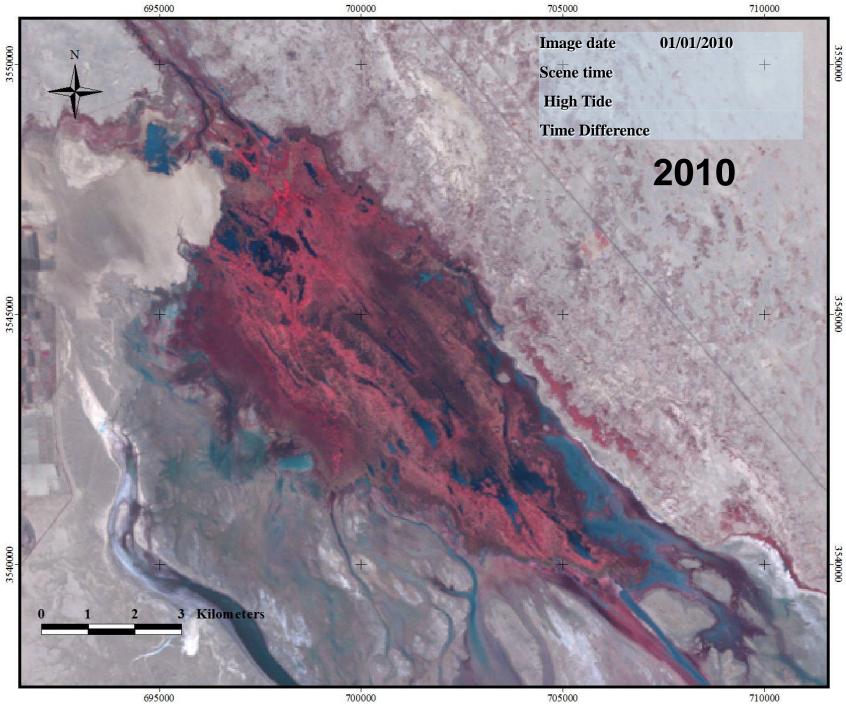












Ciénega de Santa Clara and Yuma Desalting Plant

Trial run of the YDP (May 2010-March 2011), with participation of Arizona, Nevada, California and USBOR, 30% capacity

Historic agreement between Mexico, the U.S. and environmental groups to protect the Cienega

First time in which both countries dedicate water for the environment in the delta, and the first time that environmental groups are part of the Treaty

Comprehensive binational monitoring program

#### Restoration in the Colorado River Delta:

- We have a regulatory framework, public policies and the support from different stakeholders
- Binational cooperation
- Water allocation is feasible
- The protection of large areas of wetlands and floodplain is feasible
- Resilient ecosystem: restoration is possible