Local and bi-national restoration efforts in the Colorado River Delta in Mexico

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Outline

- Current status: Why to restore the Delta?

- Restoration Efforts
  - Colorado River
  - Hardy River
  - Estuary
  - Created wetland (if time permits)
The Colorado River in 1905

Nearly 2 million acres
Dominated by cottonwood-willow forest

Photo courtesy of
Smithsonian Institution Archives
and the San Diego Natural History Museum.
Rio Hardy/Colorado
Home of the Kwapa

Photos courtesy of Smithsonian Institution Archives and the San Diego Natural History Museum.
Colorado River in 2009
After 100 years of water development:

Current wetland area is less than 10% of its original size, and continues to decline.
Conservation Priorities in the Colorado River Delta
Mexico and the United States
Water Needs

**Río Colorado**
- Flujo Base: 2 - 4 m³/s
- Pulso de Inundación: 20 - 40 m³/s
  - < 2 ppmil

**Ciénega de Santa Clara**
- 4.2 m³/s
  - < 3 ppmil

**Río Hardy**
- 1.2 - 2 m³/s
  - < 3.5 ppmil

**Estuario**
- Flujos del Hardy y Colorado + 1 - 2 m³/s
  - Flujos de inundación adicionales: en investigación
  - 4 ppmil

**Humedales Margen Izquierda**
- 0.8 – 1.2 m³/s
  - < 3.8 ppmil
Why to restore the Delta?

The Delta provides habitat for over 371 species of birds and is a critical stopover site along the Pacific Flyway.

Provides spawning and nursery grounds for fish and shellfish, including endangered species.
Restoration Efforts
Sitio propuesto de Restauración y Área Recreativa
Colorado River riparian Corridor

To enhance 33,000 hectares of riparian and marsh wetlands
Laguna Grande

Objective:

• To increase the structural diversity in vegetation cover and the extent of the cottonwood and willow forest
Laguna Grande

- Six thousand native trees have been planted in 40 acres
ADOPTA EL RÍO COLORADO

Ayudanos a conservar este lugar para ti y tu familia.

- NO tires basura
- NO tales árboles
- NO provoques incendios
- NO extraigas agua

ZONA DE RESTAURACIÓN ECOLÓGICA
Objectives:

- Make it navigable
- Enhance riparian habitat - mesquite bosque, CW-W
- Increase marsh wetland habitat
- Enhance fish habitat
Campo Mosqueda
Eco-campo Rio Hardy

Students from Mexicali valley

Law students from California
The Colorado River Estuary
Creación de un humedal artificial en la planta de tratamiento de aguas residuales Las Arenitas

Propuesta de Diseño

Marzo 26, 2009

Humedal Las Arenitas
Propuesta de diseño
Componentes del Humedal

Tratamiento

Ecológico

Recreativo
Conclusion

It is technically and politically (and institutionally) feasible to enhance riparian, marsh, and estuarine habitat in the Delta.

Ongoing national and binational efforts must continue and expand.

There are many opportunities for collaboration on research and on-the-ground implementation.

Photo courtesy of Smithsonian Institution Archives and the San Diego Natural History Museum.