

Conservation Priorities in the Colorado River Delta:

What is missing from the MSCP

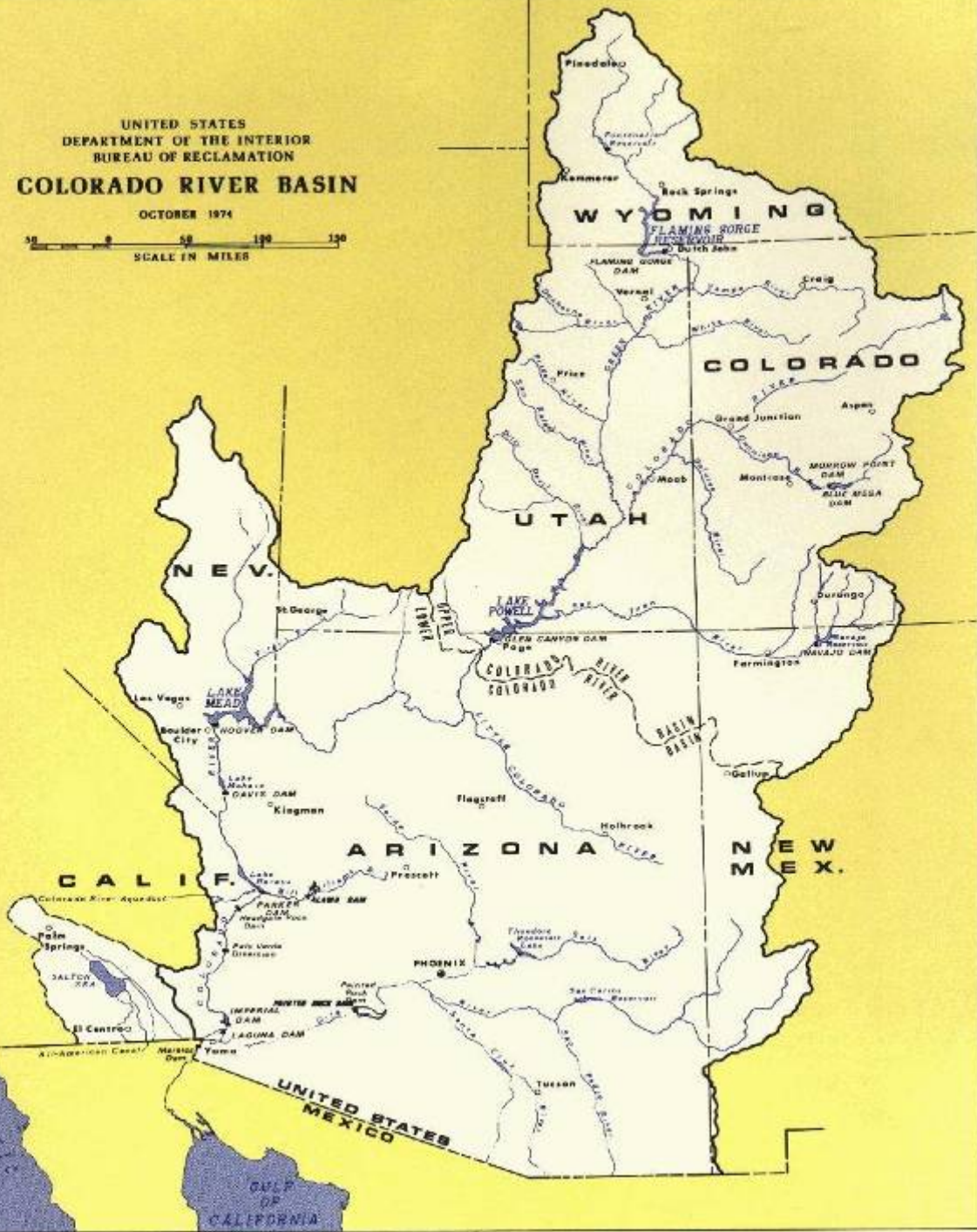


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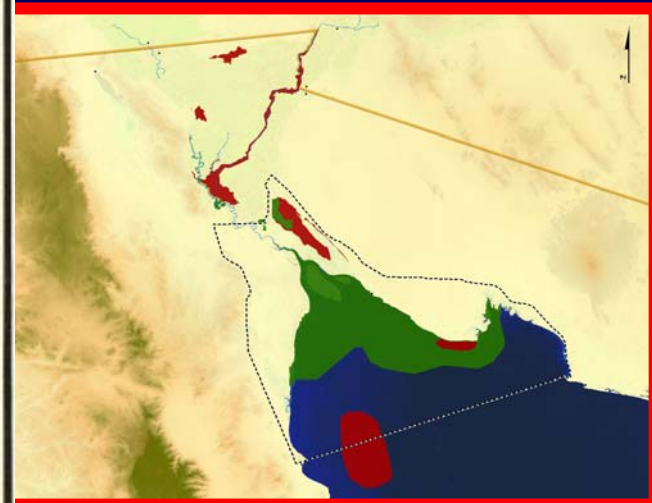
UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION
COLORADO RIVER BASIN

OCTOBER 1974

0 50 100 150
SCALE IN MILES



the Delta in Mexico, a network of 15 Priority Areas, totaling 850,000 acres, has been identified.



Proper management of these areas will ensure the long-term persistence of the Delta diversity of plants and animals.

Experts analyzed:



What can be done to protect and enhance the remaining Delta?

What are the natural areas that remain worthy of conservation?

Why do they merit conservation?

What threats can be eliminated or mitigated based on opportunities in each area?

Map of the possible

-  Protection areas (264,438 acres)
-  Restoration areas (584,958 acres)

Andrade Mesa

Cerro Prieto

Riparian Corridor

Rio Hardy

Cienega de Santa Clara

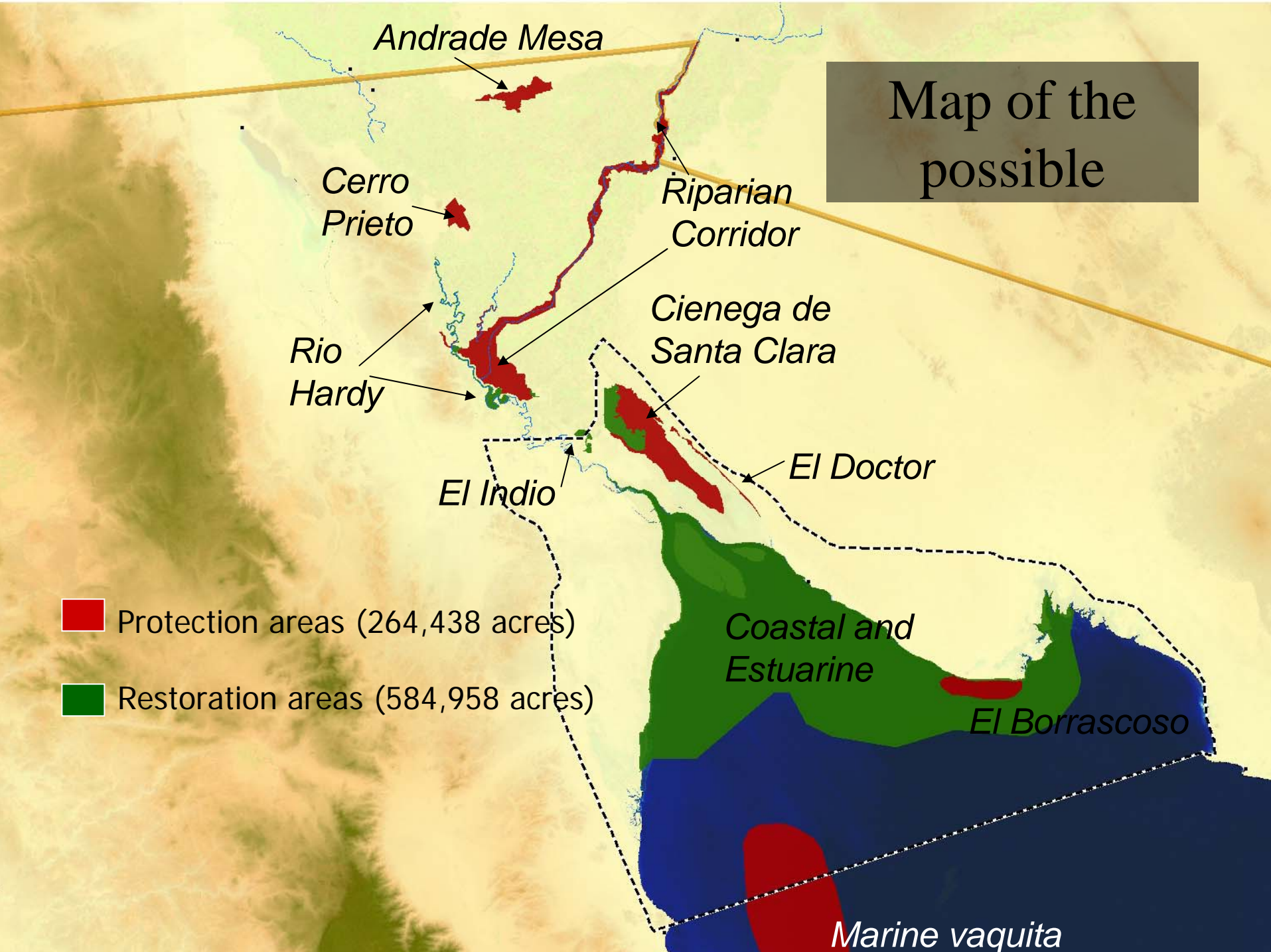
El Indio

El Doctor

Coastal and Estuarine

El Borrascoso

Marine vaquita



General Conclusions

- Sufficient information already exists about the ecosystems of the Colorado River Delta to begin action on conservation priorities.
- The principal threat to the Delta and Upper Gulf ecosystems is the lack of dedicated freshwater inputs.
- Each of the ecosystem types in the Colorado River Delta has distinct attributes, values, and water needs, but all are linked through their dependence on the hydrologic regime of the Colorado River.

Restoration efforts in Mexico: what MSCP should consider

Community-based
restoration projects:
an example of local
stewardship for the
restoration and
conservation of the
Colorado River Delta



Campo Mosqueda



- 15 acres of mesquite at the Mosqueda Family property
- Approximately 1,000 trees on drip irrigation
- The Mosqueda family is expected to plant another 5-10 acres in the near future





Cucapá El Mayor - Campo Flores



Campo Muñoz



2-acres site, with mesquite,
ironwood, and palo verde

Campo Ramona



3-acres site of mesquite

El Tapon Project by AEURHYC, A.C.

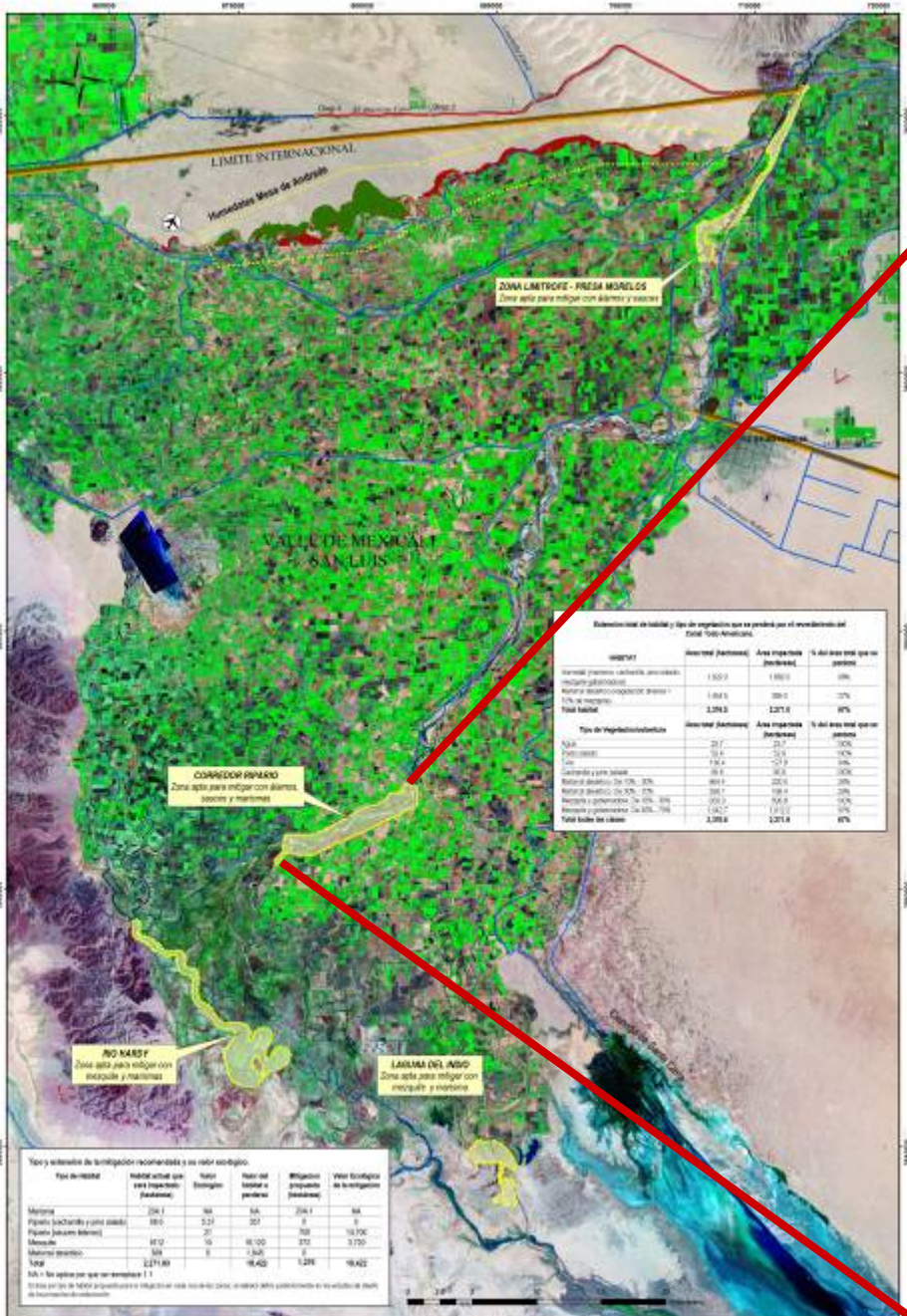






Colorado River Riparian Corridor





Balanceo de hábitat y tipo de vegetación que se pueden por el establecimiento del Canal Todoamericano

vegetación	Área real (hectáreas)	Área impactada (hectáreas)	% del área real que se pueden
Área real presente (vegetación primaria)	1 600	1 600	100%
Área real comprometida (vegetación secundaria)	1 863	380	21%
Total hábitat	3 463	2 078	60%

Tipo de Vegetación/vegetación	Área real (hectáreas)	Área impactada (hectáreas)	% del área real que se pueden
SAU	217	217	100%
Parque	132	132	100%
Parque	134	134	100%
Carretera y zona de cultivo	66	66	100%
Área de cultivo de 0.5% - 2%	661	220	33%
Área de cultivo de 2.5% - 5%	387	134	35%
Área de cultivo de 5% - 10%	272	134	49%
Área de cultivo de 10% - 20%	1 142	1 142	100%
Total hábitat en riesgo	3 288	2 078	63%

Tipos y extensiones de mitigación recomendada y su costo económico

Tipo de mitigación	Área real que se puede impactar (hectáreas)	Costo (Millones de pesos)	Costo por hectárea (pesos)	Mitigación propuesta (hectáreas)	Costo total (Millones de pesos)
Materia orgánica	206	30	146	206	30
Pajónes (saccharin y paja de maíz)	180	32	178	0	0
Pajónes (Juncus biternis)	472	27	58	122	7,100
Materia orgánica	30	0	0	122	3,700
Materia orgánica	30	0	0	0	0
Total	2 218	87	39	1 220	10,800

Nota: Se aplica un costo de mantenimiento de 11 pesos por hectárea por año.

VALORACIÓN DEL IMPACTO AMBIENTAL EN MÉXICO DEL REVESTIMIENTO DEL CANAL TODO AMERICANO Y ALTERNATIVAS DE MITIGACIÓN (FASO II)

Análisis de estrategias viables de mitigación

Fuente de Información: The Carolina Landfill Initiative (Diseño y fotografía: Marco Moreno Díaz, Francisco Zamora)

Hábitat de humedal	Caidas Canal Todoamericano
Hábitat de bosque	Revestimiento del canal
Zonas recomendadas	



Leyenda

- Pizómetro
- Transecto
- Sitios de pozos
- Transectos nuevos
- Transectos CNA

0.6 0.9 1.2 Kilómetros

Next steps in restoration efforts in Mexico

- Develop a comprehensive restoration strategy and plan (research, participatory process)
- Establish a federal designation of a Restoration Zone for the riparian corridor and Rio Hardy
- Initiate restoration demonstration projects in the riparian corridor (1,500-acre site)
- Increase support for El Tapon project and other efforts in the Rio Hardy
- Support AEURHYC, a local, community-based organization that is leading restoration efforts

Conclusions

- There are incredible resources and restoration efforts in Mexico showing that, with a small amount of money (a lot less than the MSCP's \$626 million), restoration and conservation of natural systems can take place.
- Until the U.S. and Mexican federal governments greatly increase their commitment and collaboration, the health of these ecosystems cannot be assured, and large-scale improvements in ecosystem health will remain unattainable.



Thank you



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