

RECLAMATION

Managing Water in the West

First Five Years Implementation

**Lower Colorado River
Multi-Species Conservation Program**



U.S. Department of the Interior
Bureau of Reclamation



Program Area



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LCR MSCP Goals & Objectives

- **A comprehensive 50-year species conservation and habitat management program that will:**
 - **Conserve habitat and work toward recovery of T&E species as well as reduce the likelihood of additional species being listed**
 - **Accommodate present water diversions and power production and optimize opportunities for future water and power development**
 - **Provide the basis for incidental take authorizations**

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Steering Committee Membership

- **Federal Participant Group**
- **Arizona Participant Group (26 Permittees)***
- **California Participant Group (11 Permittees)***
- **Nevada Participant Group (5 Permittees)***
- **Native American Participant Group**
- **Conservation Participant Group**
- **Other Interested Parties Group**

***Participates as a funding agency**

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Cost Sharing

- Total Program Cost
 - \$626 million (2003 dollars)
 - Adjusted Annually for Inflation
- Federal / State Cost Share
 - Split 50/50
- Cost Cap



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Partnerships

- Game and Fish Agencies (Arizona, Nevada, and California)
- Farmers Advisory Board
- Tribes
- National Wildlife Refuges



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LCR MSCP Covered Species

Total of 26 Species

- **6 Threatened and Endangered Species**
 - 2 birds, 1 reptile, 3 fish
- **20 Other Covered Species**
 - 4 mammals, 10 birds, 2 reptiles, 1 fish, 1 insect, 2 plants
- **5 “Evaluation Species”**
 - 3 mammals, 2 reptiles



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Key Program Elements

- **Creation and restoration of native riparian, marsh, and aquatic habitats**
- **Native fish populations augmentation**
- **Measures to maintain and enhance existing habitats**
- **Species-specific conservation measures**
- **Avoidance & minimization measures**
- **Long-term monitoring & research**
- **Adaptive management principles**

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Habitat Restoration

Total of 8,142 acres

- Cottonwood-Willow 5,940 acres
- Mesquite 1,320 acres
- Marsh 512 acres
- Backwaters 360 acres

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Native Fish Augmentation

- **Razorback sucker**
 - 660,000 fish over 50 years
- **Bonytail**
 - 620,000 fish over 50 years
- **Humpback chub**
 - \$10,000/year to GCDAMP for 50 years
- **Flannelmouth sucker**
 - \$80,000 over 5 years + 85 acres of backwaters



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Existing Habitat Maintenance

- **\$25,000,000 Fund**
 - Established within the first years of the program
 - Funds actions to avoid impacts to existing habitats within the planning area
- Available to Land Managers with consent of Reclamation, USFWS, and State participants

SPECIES MONITORING AND RESEARCH



Monitoring & Research Elements

- **System Monitoring**
- **Species Monitoring & Research**
- **Post-development Monitoring**
- **Database Management**
- **Adaptive Management**

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System Monitoring

- Point counts (e.g., GBBO Nevada Bird Count),
- Summer and Winter Bird Banding Stations
- Marsh birds - Inter-agency multi-species
- Southwestern willow flycatcher and yellow-billed cuckoo presence/absence surveys and habitat monitoring
- Small Mammal distribution
- Bat presence/absence and distribution
- Covered fish species monitoring

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Species Monitoring & Research

- Covered species life history studies
 - Southwestern willow flycatcher and yellow-billed cuckoo intensive studies
 - Small mammal genetics and habitat studies
 - Brown-headed cowbird and starling control
 - Bat roost and forage site identification
 - Insect population studies

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Post-development Monitoring

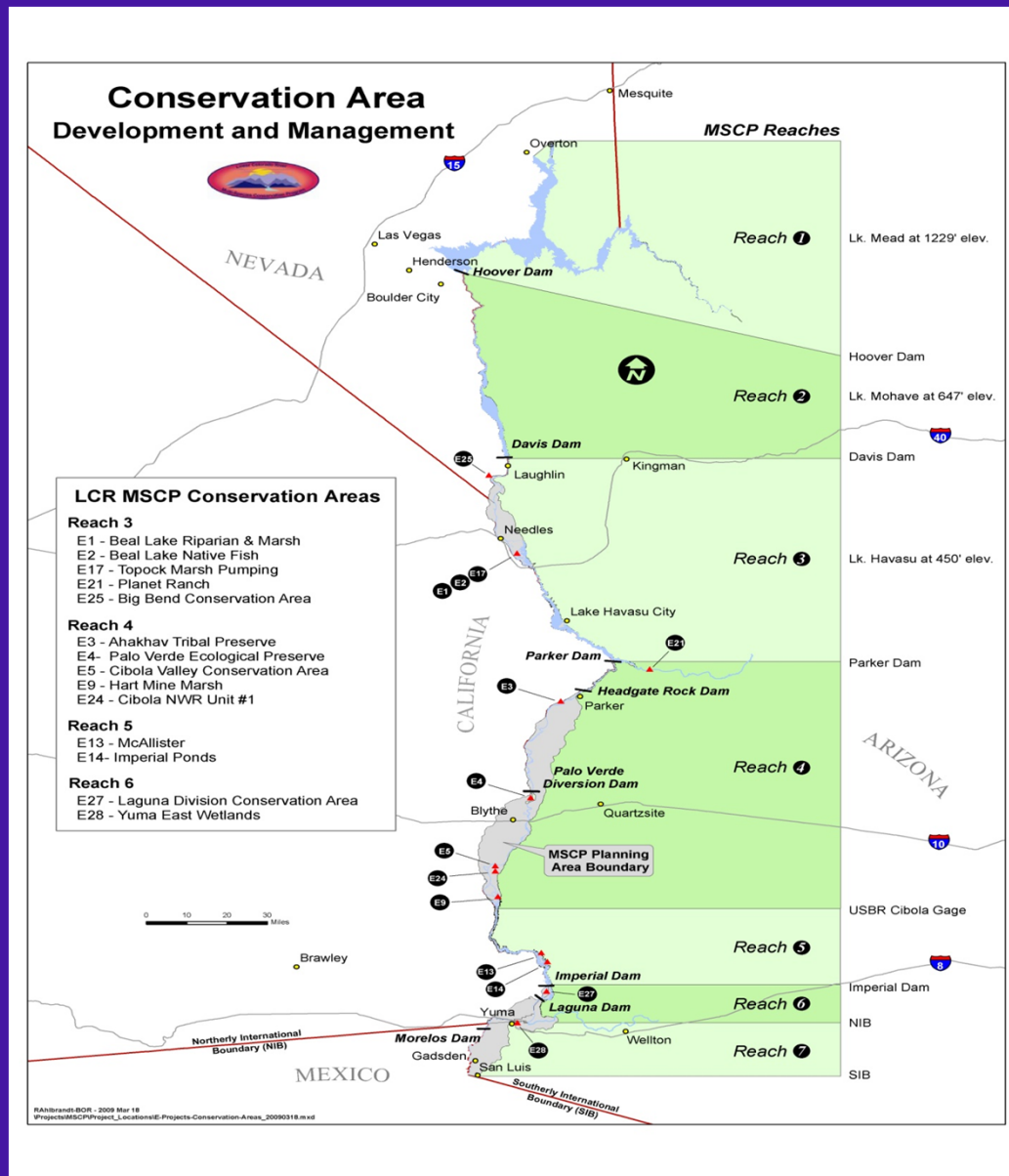
Evaluation of created and restored habitat

- Vegetation survival and growth
- Avian use of restored sites
- Small mammal colonization
- Bat foraging use
- Other Covered Species use



Conservation Area Development

Conservation Area Map



Lower Colorado River Multi-Species Conservation Program



Balancing Resource Use and Conservation

- Beal Lake Conservation Area
- Big Bend Conservation Area
- Palo Verde Ecological Reserve
- Cibola Conservation Area
- Cibola NWR Unit #1
- Hart Mine Marsh
- Imperial Ponds Conservation Area
- Hunters Hole Conservation Area
- Laguna Division Conservation Area



Conservation Areas

Lower Colorado River Multi-Species Conservation Program



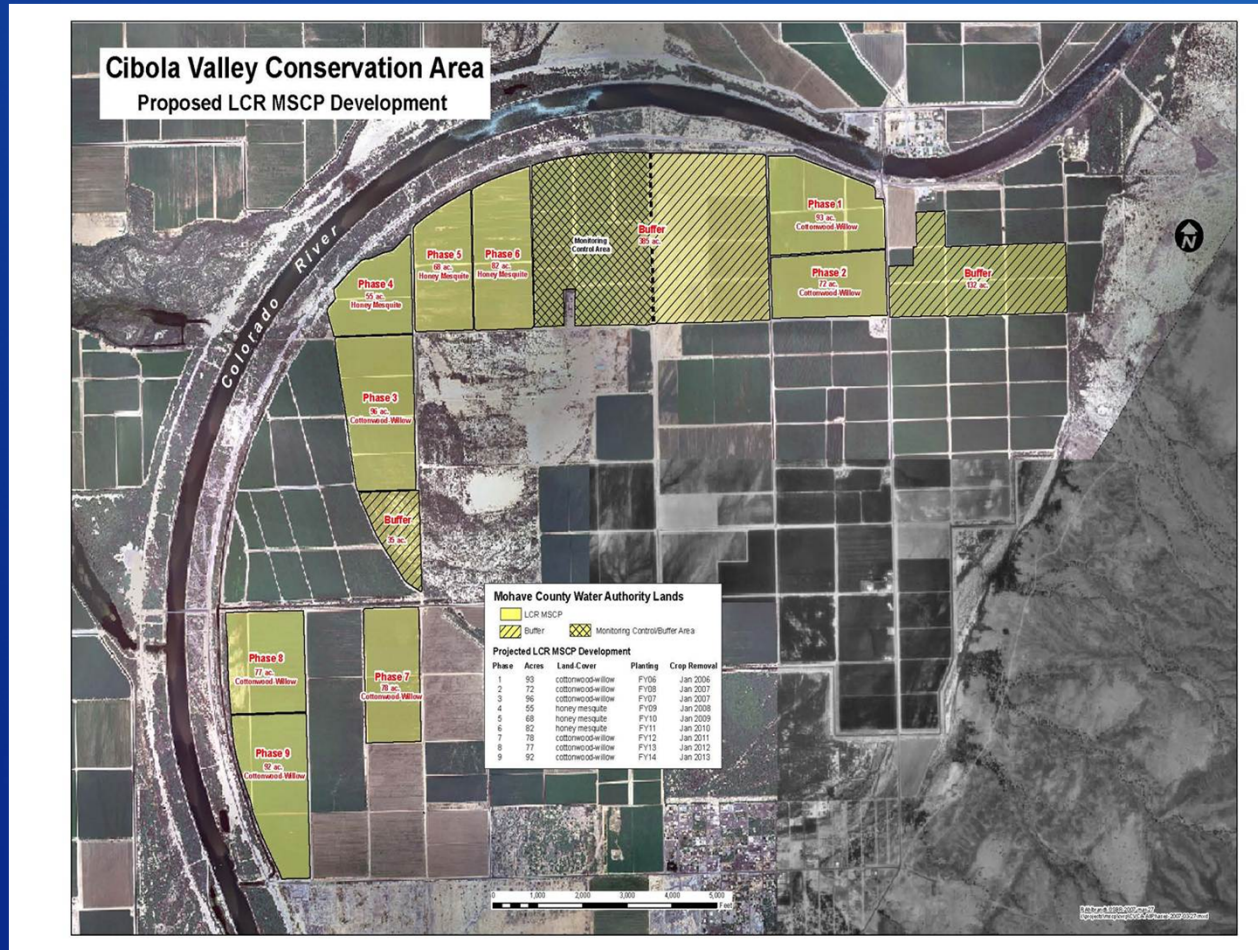
Balancing Resource Use and Conservation



**Total Acreage Created by 2011 =
2,205**



Cibola Valley Conservation Area



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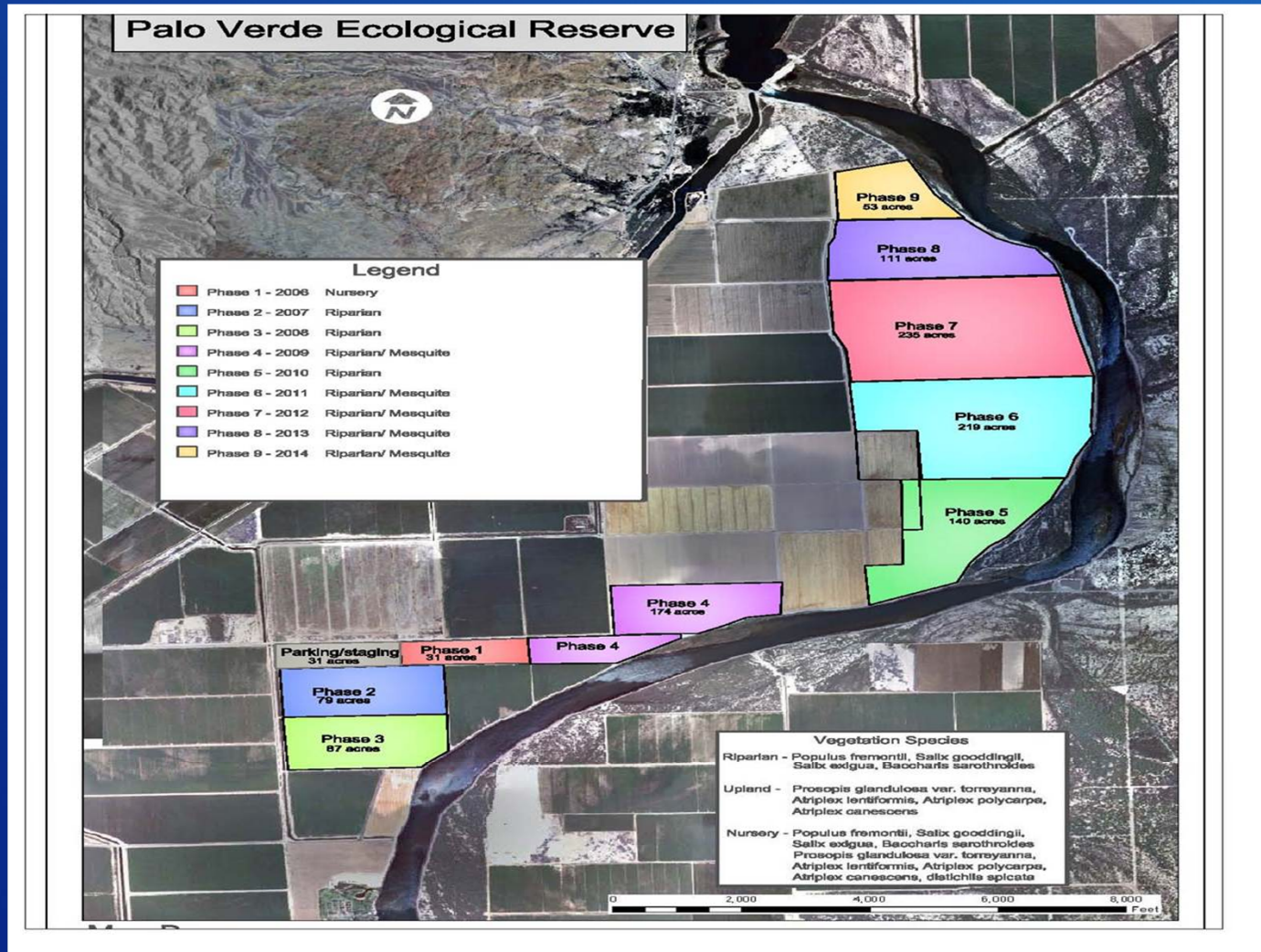
- ✓ 265 acres Cottonwood /Willow
- ✓ 218 acre Mesquite/Atriplex
- ✓ 10 confirmed MSCP Species

Yellow-billed Cuckoo



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Palo Verde Ecological Reserve



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- ✓ 719 acres Cottonwood/willow
- ✓ 50 acres Mesquite/atriplex
- ✓ 11 Covered Species



Hart Mine Marsh "Before"



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Hart Mine Marsh “After”



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Imperial Ponds Conservation Area

- 80 Acres Backwater
- 12 Acres Marsh
- 5 MSCP Species

Big Bend Conservation Area

- 15 Acres Backwater
- 3 MSCP Species

Beal Lake Conservation Area

- 107 acres Cottonwood/Willow/Mesquite
- 15 MSCP Species

Cibola NWR Unit #1/Hart Mine Marsh

- 232 Acres Cottonwood/Willow
- 255 Acres Marsh
- 12 MSCP Species



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UPCOMING RESTORATION DEVELOPMENT PROJECTS

LAGUNA

- Project Area – 1050 Acres
- Existing Conditions
 - Extensive/dense tamarisk monoculture

HUNTERS HOLE

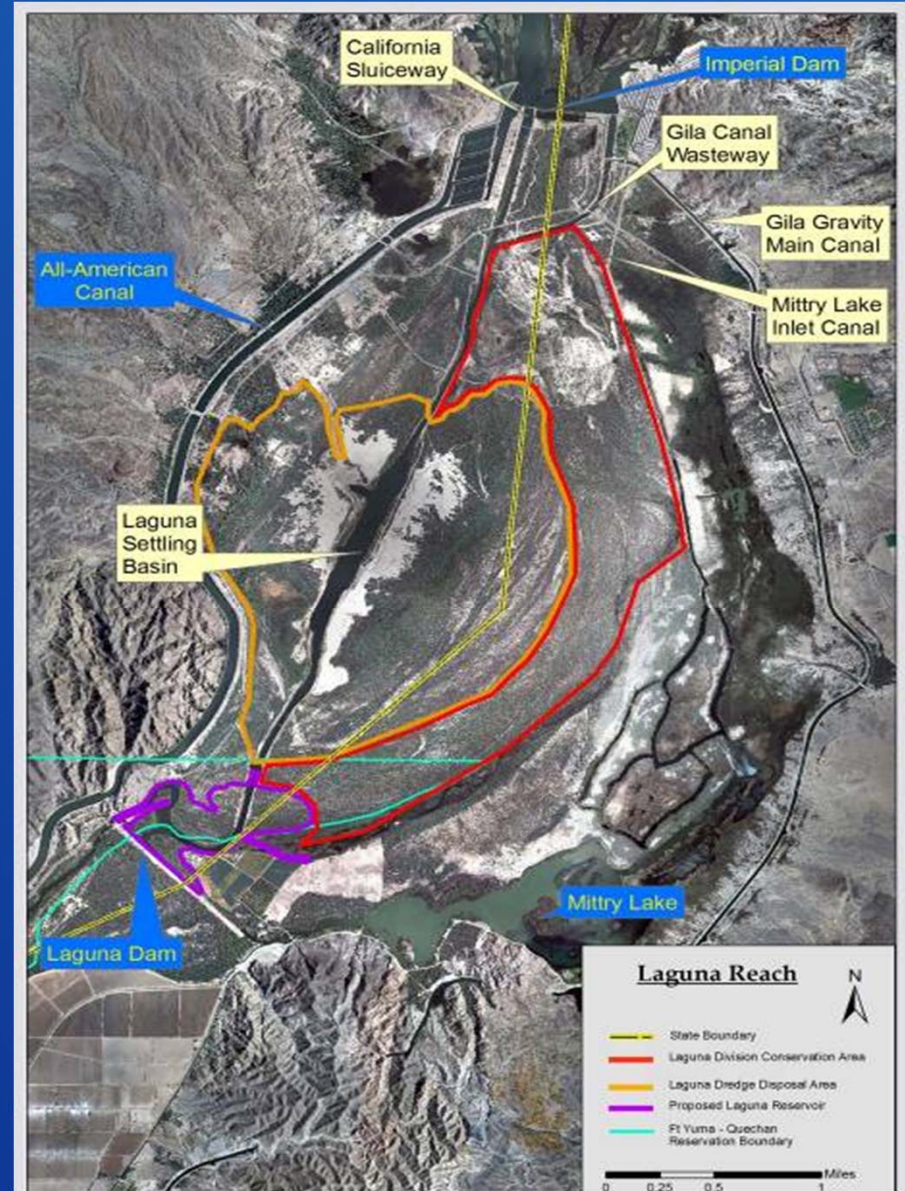
- Project Area – 50 Acres
- Existing conditions
 - Dense Tamarisk

YUMA EAST WETLANDS

- Project area – 350 Acres
- Existing Conditions
 - Restored cottonwood/willow and Marsh

PLANET RANCH

- Project Area – 500 Acres
- Existing Conditions
 - Native/Non-native Riparian



FISH AUGMENTATION

* Preliminary 2011 numbers

- ❖ Razorback Suckers = 158,998
- ❖ Bonytail Chub = 48,072



**Total Stocked =
207,070**

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WWW.LCRMSCP.GOV

QUESTIONS??

