Program Implementation

Lower Colorado River Multi-Species Conservation Program
Program Area
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
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
Cost Sharing

• Total Program Cost
  – $626 million (2003 dollars)
  – Adjusted Annually for Inflation

• Federal / State Cost Share
  – Split 50/50

• Cost Cap
Partnerships

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

Total of 8,142 acres

- Cottonwood-Willow: 5,940 acres
- Mesquite: 1,320 acres
- Marsh: 512 acres
- Backwaters: 360 acres
Riparian Restoration
Marsh Restoration
Backwater Restoration
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
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
Conservation Measures

- Maintenance of existing habitat
- Creation and long-term management of habitat specific to each species
- Avoidance & minimization of impacts on Covered Species and their habitats resulting from program implementation
- Population enhancement measures
- Monitoring & research to assess and improve program effectiveness through Adaptive Management
Adaptive Management Elements

- Measure effectiveness of Conservation Measures

- As need arises, propose revised or alternative Conservation Measures

- Address changed or unforeseen circumstances

- Provide consistency with relevant existing and future USFWS Recovery Plans
Conservation Projects

- First two LCR MSCP Conservation Areas
  - Cibola Valley Conservation Area
  - Palo Verde Ecological Reserve

- Backwaters Restoration
  - Hart Mine Marsh
  - Walker Lake
  - Draper Lake
  - Butler Lake
  - Imperial NWR Demonstration Ponds
Monitoring & Research Elements

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

- Point counts (e.g., GBBO Nevada Bird Count),
- MAPS,
- 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
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
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