



Five Years of Success



LCR MSCP Background

- 1980's-1990's -- Colorado River fish and bird species listed as endangered
- 1994 -- Colorado River designated as critical habitat for four fish species
- 1997 -- Biological Opinion declares lower Colorado River operations jeopardize the willow flycatcher
- 1997 -- SW Center for Biological Diversity files suit to stop filling of Lake Mead that would destroy flycatcher habitat



LCR MSCP Background

- 1994 -- Memorandum of Understanding with federal, state, water, and wildlife agencies
- 1996 -- Memorandum of Agreement to develop a species conservation program
- 1997 -- creation of Steering Committee and cost sharing agreements
- 2005 -- Record of Decision approving the Lower Colorado River Multi-Species Conservation Plan



LCR MSCP Goals

- Conserve habitat, work toward recovery of listed species, and reduce likelihood of additional listings
- Provide basis for federal and state Endangered Species Acts permits for a 50-year term
- ESA compliance for existing water and power operations and future changes in point of diversion of up to 1.5 million acre-feet/year



LCR MSCP Location

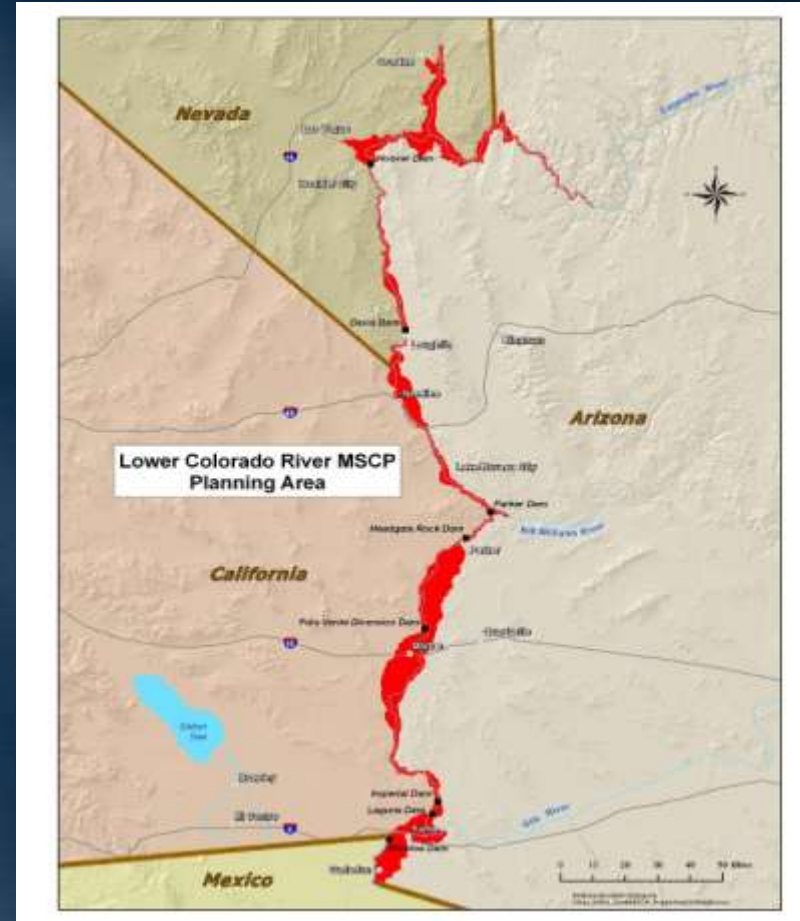
Planning Area:

Historic Floodplain

Lake Mead (full pool)

to the

Southern International
Boundary with Mexico





LCR MSCP Participants

- Broad cross-section of interests representing:
 - Department of the Interior
 - Department of Energy (WAPA)
 - Native American Tribes
 - State water, power, and wildlife agencies in Arizona, California, and Nevada
 - Lower Colorado River water and power agencies
 - Environmental organizations
 - County, city, and regional governments



California Covered Activities

- Diversion of up to 4.4 million acre-feet/year plus unused apportionment and surplus water
- Future changes in point of diversion of up to 800,000 acre-feet/year
- O&M activities on diversion and conveyance facilities within the river floodplain
- Power generation and transmission



Key LCR MSCP Species

- 27 Covered Species and 4 Evaluation Species
 - Fish: 4 species
 - Birds: 12 species
 - Mammals: 7 species
 - Reptiles: 2 species
 - Amphibians: 3 species
 - Insects: 1 species
 - Plants: 2 species



LCR MSCP Actions

- Creation and restoration of native riparian and aquatic habitats
 - Cottonwood/willow 5,940 acres
 - Honey mesquite 1,320 acres
 - Marsh 512 acres
 - Backwaters 360 acres
- Protection of existing habitat
- Fish Augmentation Programs
 - 660,000 razorbacks and 620,000 bonytail
- Monitoring & Research Activities



Implementation Costs

- Program cost \$626 million (1993 dollars)
- Cost share 50/50 federal & non-federal
- Metropolitan pays 14% (\$87million in 1993 dollars)
- Funding paid on annual schedule to cover costs of restoration, maintenance, monitoring, and research, over the 50-year program term



LCR MSCP Benefits to Metropolitan

- Coverage for ongoing and future Colorado River water and power operations
- ESA/CESA protection for 50 years
- Sets mitigation obligation and provides assurances against increased costs
- Reclamation responsible for implementation
- Fulfills environmental stewardship responsibility



First Five Year Highlights

- Creation and maintenance of new habitat as of 2010
 - 1,141 acres of cottonwood-willow
 - 139 acres of honey mesquite
 - 186 acres of marsh
 - 95 acres of backwater



First Five Year Highlights

- Key Restoration Areas
 - Palo Verde Ecological Reserve
 - Cibola Valley Wildlife & Conservation Area
 - Over 2 million trees planted at these two sites
 - Hart Mine Marsh
 - Big Ben Backwater
 - Imperial Ponds (Imperial NWR)



Riparian Habitat Restoration





Marsh Restoration





Backwater Restoration





First Five Year Highlights

- Build habitat and the endangered species will come
- Monitoring results show that covered species are using and thriving in the new habitat areas
 - Nesting riparian and marsh birds
 - Bat species migration to new habitat
 - Colonization by cotton rats



Riparian Habitat Birds





California Leafy Nosed Bat





First Five Year Highlights

- Fish Augmentation Program
 - Larvae collection and rearing
 - 236,000 razorbacks
 - Repatriation
 - 133,000 razorbacks
 - 41,000 bonytail
- Stable population of flannelmouth sucker
- New remote sensing monitoring technology



Humpback Chub





Challenges for the Next Five Years

- Introduction of quagga mussels
- Predation of stocked sensitive fish
- Sufficient water for restoration needs and water rights accounting
- Acquisition of habitat sites in California
- Invasion of tamarisk beetle
- Balancing species needs and local interests