



Lower Colorado River Multi-Species Conservation Program

Balancing Resource Use and Conservation

LCR MSCP – RESTORATION THROUGH COLLABORATION



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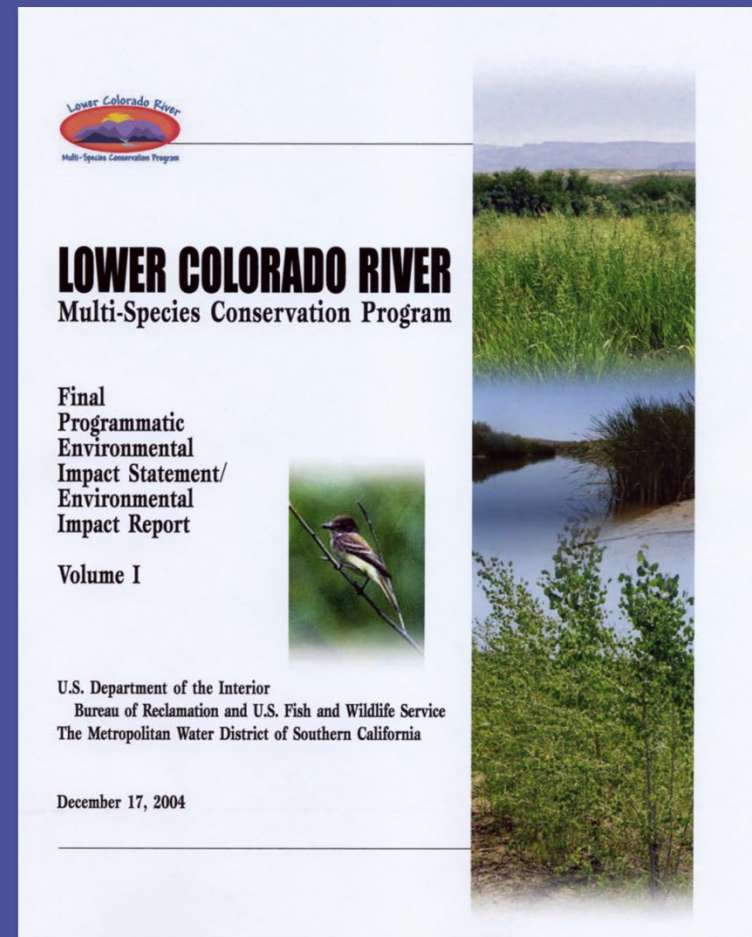


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LCR MSCP ESA COMPLIANCE

- 50 Years of ESA and CESA Compliance
 - Unique - Section 7 and 10
 - HCP/BO
 - Cost Shared
- Covered Actions
 - Delivery and Diversion of 9 MAF
 - Generation of Power
 - Maintenance Activities
 - Movement of up to 1.574 MAF





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Omnibus Public Lands Act of 2009 Public Law 111-11

- Authorized Secretary to manage & implement the LCR MSCP
- Recognizes Program Documents
 - HCP
 - BA/BO
 - EIS/EIR
 - Funding & Management Agreement
 - Implementing Agreement
 - Water Accounting Agreement



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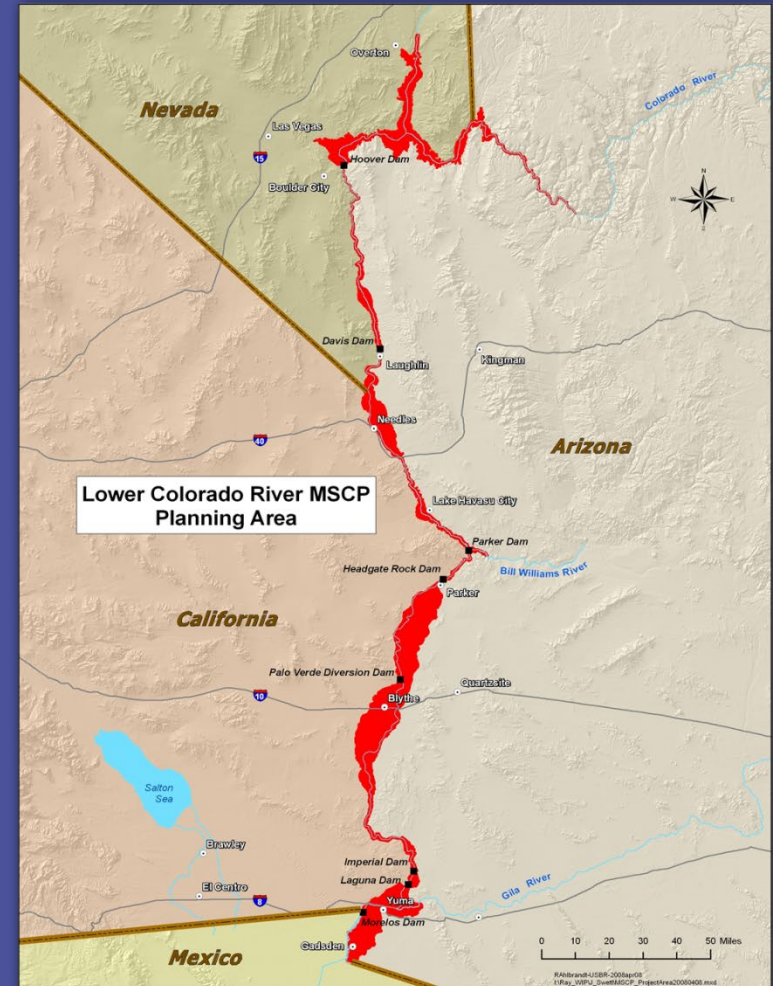


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LCR MSCP PLANNING AREA

- Full pool elevation of Lake Mead to SIB
- Historic 100-year floodplain
- Full pool elevations of main stem reservoirs





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LCR MSCP GOALS & OBJECTIVES

- 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 through the implementation of the HCP



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STEERING COMMITTEE MEMBERSHIP (56 MEMBERS)

- 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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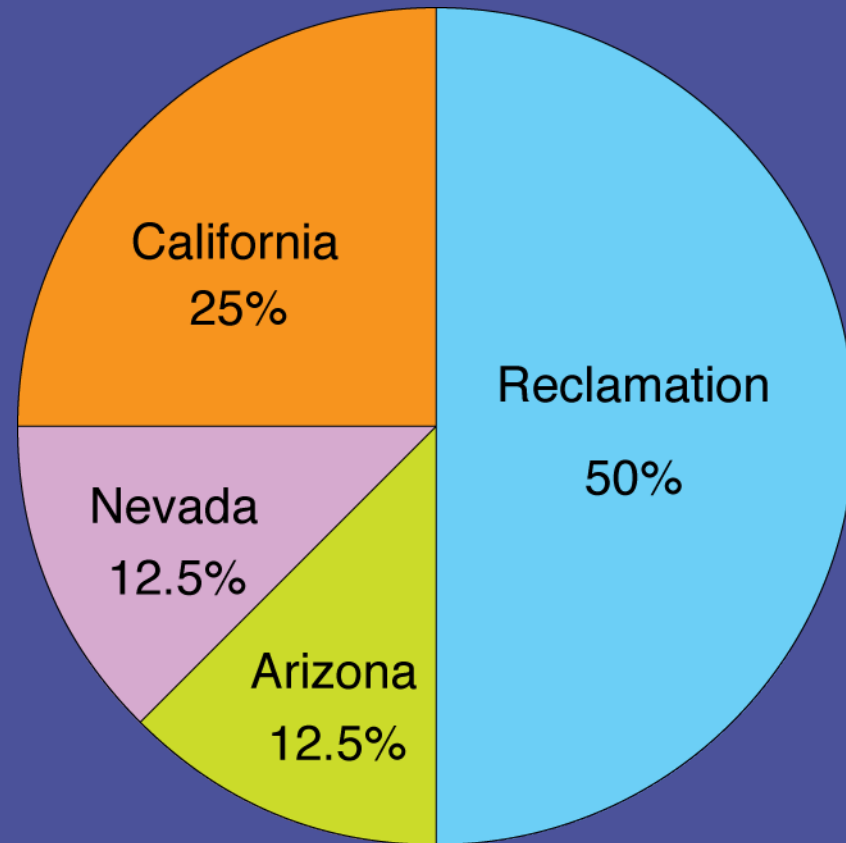


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COST SHARING

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





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LCR MSCP COVERED SPECIES

- 9 T&E species
 - 3 birds, 3 reptile, 3 fish
- 19 Other species
 - 4 mammals, 10 birds, 2 reptile/amphibian, 1 fish, 1 insect, 2 plants
- 5 Evaluation species
 - 3 mammals, 2 amphibians



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PROGRAM COMPONENTS

- Program Administration
- **Fish Augmentation**
- Species Research
- System-wide Monitoring
- **Conservation Area Development & Management**
- Existing Habitat Maintenance
- Adaptive Management



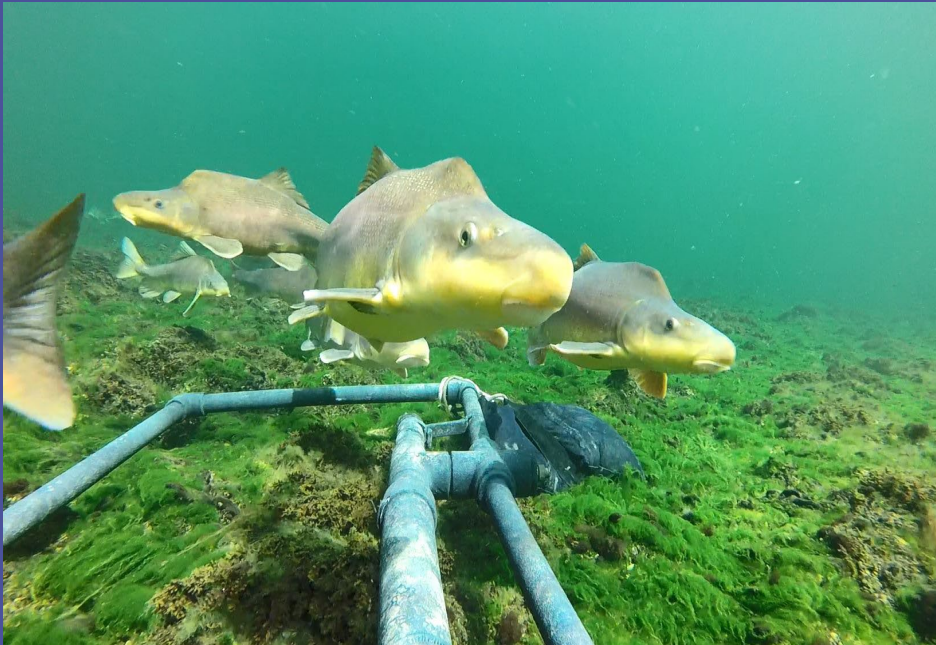
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FISH AUGMENTATION



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Balancing Resource Use and Conservation

CONSERVATION AREA DEVELOPMENT AND MANAGEMENT (TOTAL 8,132 MINIMUM ACRES)

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



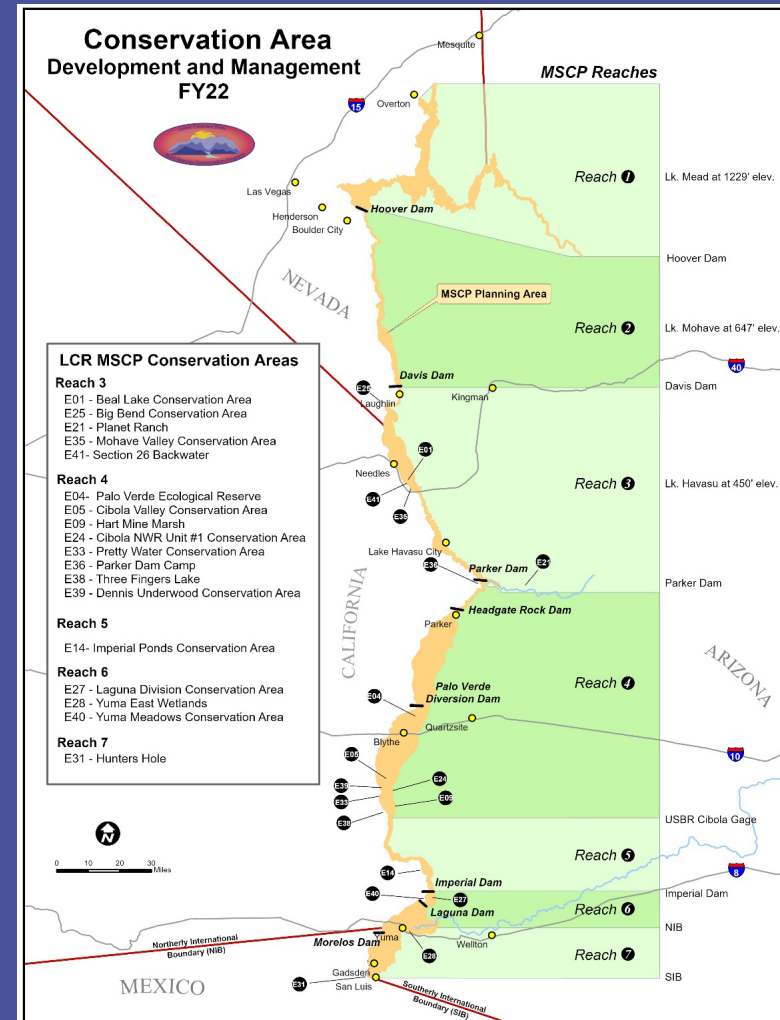


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LCR MSCP CONSERVATION AREAS

- 18 Conservation Areas Established
 - 9.5 in AZ
 - 7.5 in CA
 - 1 in NV





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CONSERVATION AREA DEVELOPMENT AND MANAGEMENT GUIDELINES

- LCR MSCP is habitat based
- HCP conservation measures are species specific
- Total habitat creation acre goals are based on creating habitat mosaics (i.e. each acre should provide habitat for multiple species)
- Total habitat creation acre goals are a minimum which allows flexibility in meeting species specific conservation measures



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ACCOMPLISHMENTS

- “Build it and they will come” - Most riparian and marsh species are responding to the created habitat
- Land and water for Conservation Areas have mostly been secured to meet the goals of the program
- Approximately 75% of the required habitat has been created in the first 15 years
- The flexibility in the program documents and the adaptive management approach have allowed us to meet challenges



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CHALLENGES

- Bonytail Conservation
- Completing Conservation Area creation within next 15 years (logistics)
- Developing long-term management guidelines for created habitats
- The “Unknown” (Drought, Climate Change, Invasive Species, etc.)
 - The HCP addresses shortage



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WHY DOES THE LCR MSCP WORK?

- The Program has a well-defined purpose, goals, and objectives
- The HCP has attainable conservation measures
- The flexibility in the program documents and the adaptive management approach has allowed us to meet challenges and will allow us to continue to adapt
- The Steering Committee has been an active participant throughout implementation and is willing to compromise to move the program forward because a majority have a stake in its success



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ADAPTIVE MANAGEMENT

- Using best available tools
 - PIT tags
 - lidar
 - Satellite-based remote sensing
 - ARUs
 - Automation
 - Digital field collection



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ADAPTIVE MANAGEMENT

- Development of Adaptive Management Plans and Conservation Area Management Plans
- Using data/science to inform decision making
- Habitat manipulation
- Fish augmentation
- Monitoring adjustments



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ESA Compliance for Drought Responses – Flexibility and Collaboration

- **2022 BA/BO Reduction in flow coverage (DCP & 500+ Plan)**
 - Below Hoover Dam reduction 845,000af to 1.574 maf
 - Below Davis Dam reduction 860,000af to 1.574maf
 - Below Parker Dam reduction 1.574maf
- **2023 BA/BO Reduction in flow coverage (SEIS)**
 - Already a LCR MSCP covered species
 - Below Hoover/Davis/Parker Dams reduction 1.574 maf to 4.0maf
- **Post-2026 Compliance**
 - 2007 Interim Operating Guidelines expire on December 31, 2026



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Balancing Resource Use and Conservation COLLABORATION

- **Other Federal Agencies**
 - FWS, USGS, BLM, Corps
 - State resource agencies
 - Permittees - their environmental resource staff
 - Communities where we establish habitat
 - Grant partners
 - Department and current administration
 - Scientists dedicated to protecting our covered species
 - NGOs, non-profits
 - Tribes
- **Reclamation**
 - GCDAMP
 - Other restoration programs
 - Other offices that have ESA obligations
 - BCOO
 - IT, admin, HR, etc.
 - SEIS team
 - Post-2026 team
 - NEPA teams
 - Contractors
 - SME in the region



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LCROP MSCP - Program Requirements

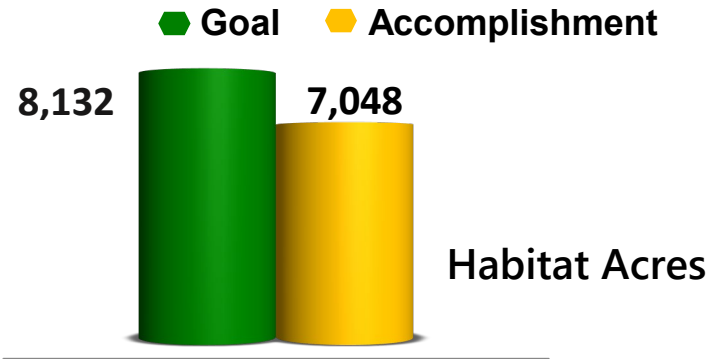
Conservation Area Development and Fish Augmentation

FY 2055 Program Goals vs. FY 2022 Accomplishments

Habitat Creation Goals:

8,132 Acres

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



Fish Augmentation Goals:

1,280,000 Fish

- Bonytail - 620,000
- Razorback Sucker - 660,000

