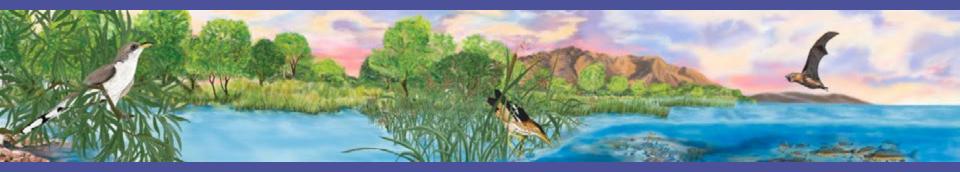
Balancing Resource Use and Conservation

LOWER COLORADO RIVER MULTI-SPECIES CONSERVATION PROGRAM



John Swett Program Manager LCR MSCP Bureau Of Reclamation Boulder City, Nevada



Balancing Resource Use and Conservation

LCR MSCP PURPOSE

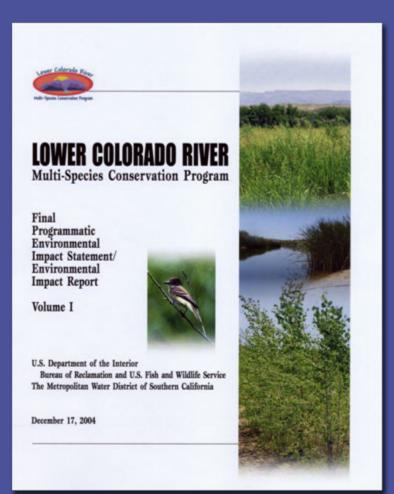
Multi-stakeholder Federal and non-Federal partnership responding to the need to balance the use of lower Colorado River (LCR) water resources and the conservation of native species and their habitats in compliance with the Endangered Species Act.



Balancing Resource Use and Conservation

LCR MSCP ESA COMPLIANCE

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



Balancing Resource Use and Conservation

LCR MSCP PLANNING AREA

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



Balancing Resource Use and Conservation

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



Balancing Resource Use and Conservation

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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LCR MSCP COVERED SPECIES

- 8 T&E species
 - •3 birds, 2 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



Balancing Resource Use and Conservation FISH AUGMENTATION





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FISH AUGMENTATION GOALS

- 660,000 Razorback Suckers
- 620,000 Bonytail



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

Balancing Resource Use and Conservation

FISH AUGMENTATION ACCOMPLISHMENT THROUGH FY20

SPECIES	LAKE MOHAVE	DAVIS-PARKER	BELOW PARKER	TOTAL	AUGMENTATION TOTAL
RAZORBACK SUCKER	139,591*	104,068	123,077	366,736	227,145
BONYTAIL	2,330	61,081	51,075	114,486	114,486
TOTAL	141,921*	165,149	174,152	481,222	341,631

*Lake Mohave razorbacks don't count toward augmentation goals – separate conservation measure



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CONSERVATION AREA DEVELOPMENT & MANAGEMENT







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CONSERVATION AREA DEVELOPMENT AND MANAGEMENT (TOTAL MINIMUM ACRES)

•Cottonwood-Willow - 5,940 Ac

- Mesquite 1,320 Ac
- Marsh 512 Ac
- Backwaters 360 Ac





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

Balancing Resource Use and Conservation

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

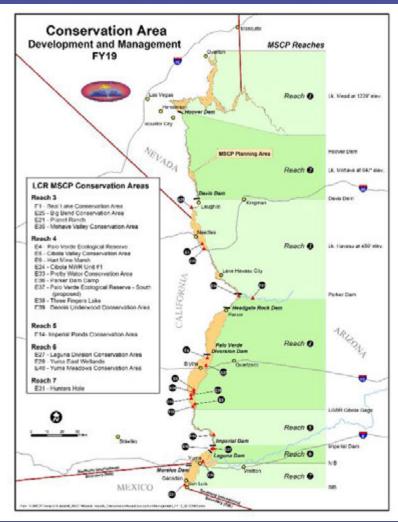


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LCR MSCP CONSERVATION AREAS

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



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LAND COVER TYPE BY STATE THROUGH FY20

STATE	COTTONWOOD- WILLOW	HONEY MESQUITE	MARSH	BACKWATER	TOTAL
ARIZONA	3,021	937	362	80	4,400
CALIFORNIA	1,096	964	0	63	2,123
NEVADA	0	0	0	15	15
TOTAL	4,117	1,901	362	158	6,538



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ACCOMPLISHMENTS

- "Build it and they will come" Most riparian and marsh species are responding to the created habitat
- Conservation Areas have 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



Balancing Resource Use and Conservation

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.)



Balancing Resource Use and Conservation

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 allowed us to meet challenges
- 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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