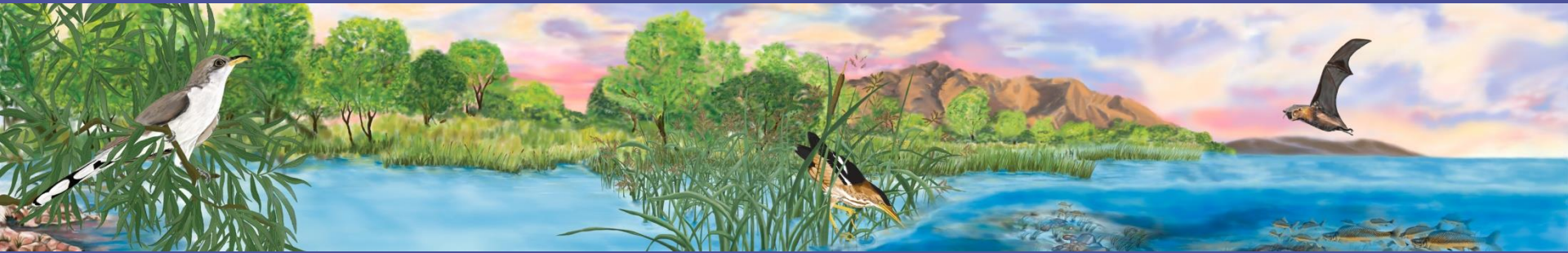


Lower Colorado River Multi-Species Conservation Program



Balancing Resource Use and Conservation

LOWER COLORADO RIVER MULTI-SPECIES CONSERVATION PROGRAM





Lower Colorado River Multi-Species Conservation Program

Balancing Resource Use and Conservation

LCR MSCP FY2015 Overview Funding Summary

FY2015 Total Required Funding	FY2015 Approved Estimate	FY2015 Actual Obligations	Cumulative Program Accomplishment
\$37,399,320	\$34,801,732*	\$26,628,171.48**	\$222,697,564.14

*Approved Estimate less than Required due to Reclamation budget constraints

**Doesn't include L&WF (\$6.1m)





Lower Colorado River Multi-Species Conservation Program

Balancing Resource Use and Conservation

FY2015 Program Element Accomplishment

Program Administration	\$ 1,140,477.22 (4%)
Fish Augmentation	\$ 2,116,834.08 (8%)
Species Research	\$ 2,756,723.76 (10%)
System Monitoring	\$ 3,692,854.30 (14%)
Conservation Area D&M	\$ 7,706,600.64 (29%)
Post Development Monitoring	\$ 1,155,212.56 (4%)
AMP	\$ 918,785.05 (4%)
Habitat Maintenance Fund	\$ 5,480,049.36 (21%)
Remedial Measure Fund	\$ 1,562,029.94 (6%)
Public Outreach	\$ 98,604.57 (*%)
TOTAL	\$ 26,628,171.48





Lower Colorado River Multi-Species Conservation Program

Balancing Resource Use and Conservation FY2015 Financial Accomplishments

- Obligations under approved Work Tasks by \$2,023,561
 - Species Research consolidated resulting in less than anticipated obligations
 - LDCA funding obligated in FY14 resulting in less FY15 obligations
- Status of Special Funds
 - HMF: \$5,480,049.36 FY15 payment
 - \$4,826,034.36 FY15 required
 - \$654,015 FY15 underfunding make-up (CA)
 - Cumulative Total through FY15 (last funding year) = \$34,179,143.14
 - RMF: \$1,562,029.94 FY15 payment
 - \$322,595.56 FY15 required
 - \$1,239,434.38 FY15 underfunding make-up (CA)
 - Cumulative Total through FY15 = \$3,313,880.41
 - LWF: \$6,100,000 contributed in FY15
 - Cumulative Total through FY15 = \$19,600,000



Lower Colorado River Multi-Species Conservation Program



Balancing Resource Use and Conservation

2015 Wildlife Accomplishments





Lower Colorado River Multi-Species Conservation Program

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Species Research

7 research projects focused on 11 species to:

- develop effective survey methods,
- understand population size and habitat connectivity through genetic analyses, and
- measure characteristics of habitat to determine the components that are critical to support these species.

The following research projects were closed in FY15:

- C4: Relict Leopard Frog
- C27: Small Mammal Population Studies
- C35: Western Red Bat and Western Yellow Bat Roosting Characteristics Study





Lower Colorado River Multi-Species Conservation Program

Balancing Resource Use and Conservation

System Monitoring

System-wide monitoring continued along the LCR and adjacent river systems for:

- southwestern willow flycatcher
- yellow-billed cuckoo
- marsh birds
- riparian birds
- avian productivity
- bats
- rodents
- amphibians

HIGHLIGHTS:

- 109 Yuma clapper rail detections during the third survey period
- 143 resident or breeding southwestern willow flycatchers were detected and 67 confirmed breeding territories
- 2 confirmed, 3 probable and 2 possible yellow-billed cuckoo breeding territories on system-wide plots (most yellow-billed cuckoos were observed on conservation areas)





Lower Colorado River Multi-Species Conservation Program

Balancing Resource Use and Conservation

Post-Development Monitoring

Count of LCR MSCP Terrestrial Species Detected During Post-Development Monitoring in FY15

Conservation Area	Count of LCR MSCP Terrestrial Species Detected in FY15
Beal Lake	11
Big Bend	3
Cibola NWR Unit #1	9
Cibola Valley Conservation Area	8
Hart Mine Marsh	3
Hunters Hole	5
Imperial Ponds Conservation Area	2
Laguna Division Conservation Area	1
Palo Verde Ecological Reserve	12
Yuma East Wetlands	9



Lower Colorado River Multi-Species Conservation Program

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Listed Species Highlights:

- 46 yellow-billed cuckoo territories were confirmed at LCR MSCP conservation areas
 - 1 at BLCA
 - 41 at PVER (Phases 2–7)
 - 4 at Cibola NWR Unit #1 (Crane Roost)
 - An additional 18 probable and 31 possible breeding territories were observed on conservation areas
- One possible resident willow flycatcher was observed at PVER, on seven consecutive visits from May 31 to June 14.
- A second flycatcher was detected on June 24 at BLCA, but no breeding evidence or band was observed, and it was likely not a resident flycatcher.
- Yuma clapper rails were detected at BLCA, BBKA, Hart Mine Marsh, IPCA in Field 18, and Yuma East Wetlands.
- One northern Mexican gartersnake confirmed at BLCA



Lower Colorado River Multi-Species Conservation Program



Balancing Resource Use and Conservation

FY2015 Fisheries Accomplishments



Bonytail captured in A10 Backwater on 7/12/15

Photo by Chris Meachum

used with permission





Lower Colorado River Multi-Species Conservation Program

Balancing Resource Use and Conservation

FY2015 Fish Augmentation and Larvae Collection

Reach 2 (RASU 5): Stocked 15,899 RASU > 300 mm

Reach 3 (RASU 3): Stocked 6,348 RASU > 300 mm

Reaches 4/5 (RASU 3): Stocked 5,291 RASU > 305 mm

Total FY2015 RASU for credit = 11,639

Reach 3 (BONY 3): Stocked 5,729 BONY > 300 mm

Reaches 4/5 (BONY 3): Stocked 4,864 BONY > 305 mm

Total FY2015 BONY = 10,593

FY2015 Larvae collected from Lake Mohave = 17,841





Lower Colorado River Multi-Species Conservation Program

Balancing Resource Use and Conservation

Fisheries Monitoring FY2015 - D8 and F5

- Ongoing recruitment in Lake Mead continues to be documented; RASU larvae continue to be collected at 3 sites in Lake Mead.
- Current RASU population estimates in Reach 2 and 3 are 3,505 and 4,795 (derived), respectively. Estimates for both these reaches have increased.
- Razorback sucker continue to be contacted in Reaches 4 and 5 in small numbers. A small population persists in Reach 4, however, re-contact rates are too low to develop a population estimate.
- No native fish contacted in BLCA after toxic golden algae event in 2013. Water quality monitoring continued in BLCA with no detections of golden algae since 2013. Razorback and flannelmouth sucker were again contacted in BBCA in FY15.





Lower Colorado River Multi-Species Conservation Program

Balancing Resource Use and Conservation

Fisheries Research Highlights FY2015

C47 - Genetic Monitoring and Management of Recruitment in Bonytail Rearing Ponds:

Unwanted bonytail recruitment in rearing ponds was effectively controlled using a native predator to target spawned larval bonytail:

- Expected better growth rates of bonytail
- Eliminate any genetic concerns associated with bonytail recruitment
- Expected to be incorporated as part of the regular rearing practice at the SNARRC.

G3 and C65 - Preliminary efforts made to document bird predation on native fishes using (PIT) tag scanners:

- PIT tags were detected on bird roosts within 24 hours of a stocking event
- Additional scanning under a known roost documented 23 “dead tags” some dating back to 2003





Lower Colorado River Multi-Species Conservation Program

Balancing Resource Use and Conservation

Fisheries Research Highlights FY2015 (continued)

C32: Tested pH levels for limiting successful bonytail egg development and larval survival. Greater success was observed at lower pH levels

- Egg hatch rates were reduced as pH increased with the greatest reduction occurring at pH levels greater than 9.5 with zero hatching at 10.5
- Larvae survival rates were reduced as pH increased with the greatest reductions occurring at pH levels greater than 10 with almost no survival at 10.5

C25: Chemical renovation was implemented at the Imperial Ponds Conservation Area (IPCA) using two applications of rotenone on all 6 ponds .

- Renovation was considered successful; the only non-native species detected post-treatment was mosquitofish in Pond 5.
- Data collected from the salvage efforts indicated that in Pond 1, recruitment of both razorbacks and bonytail had occurred.





Lower Colorado River Multi-Species Conservation Program

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2015 Restoration Accomplishments

- Site Selection
 - PVER – South
 - Parker Dam Camp
 - Three Fingers Lake
- Conservation Area Development & Management
 - Laguna Division Conservation Area (1,171 acres mostly CW)
 - Pretty Water Conservation Area (566 acres of HM)
 - CVCA Phase 7 (72 acres of HM)





Lower Colorado River Multi-Species Conservation Program

Balancing Resource Use and Conservation

Table 1-13.—Managed Acres by Conservation Area Through FY15

Conservation Area	Established Land Cover Types	Managed Acreage	Available Lands
Beal Lake Conservation Area (Arizona)	116	116	116
Palo Verde Ecological Reserve (California)	1,023	1,023	1,023
Cibola Valley Conservation Area (Arizona)	742	890	1,282
Hart Mine Marsh (Arizona)	255	255	255
Imperial Ponds Conservation Area (Arizona) ¹	92	126	126
Big Bend Conservation Area (Nevada)	15	15	15
Cibola National Wildlife Refuge Unit #1 (Arizona)	365	950	950
Laguna Division Conservation Area (Arizona and California) ⁴	1,171	1,171	1,171
Yuma East Wetlands (Arizona)	380	380	380
Hunters Hole (Arizona)	44	44	44
Pretty Water Conservation Area (California)	566	566	566
Total	4,769	5,536	5,928

¹ Includes 34 acres of cover crop, which will ultimately be converted to cottonwood-willow.

Lower Colorado River Multi-Species Conservation Program



Balancing Resource Use and Conservation

Proposed FY2017 Program
Work Plan and Budget





Lower Colorado River Multi-Species Conservation Program

Balancing Resource Use and Conservation

FY2017 Funding Requirements*

(Preliminary Inflation Rate = 1.393%)

Funding Entity	FY2017 Contributions	FY2017 Adjusted Contributions
Federal	\$15,437,226.00	\$15,437,226.00
Non-Federal	\$15,437,226.00	\$15,437,226.00
<i>California</i>	<i>\$ 7,718,613.00</i>	<i>\$ 7,351,921.42</i>
<i>Arizona</i>	<i>\$ 3,859,306.50</i>	<i>\$ 4,592,689.66</i>
<i>Nevada</i>	<i>\$ 3,859,306.50</i>	<i>\$ 3,492,614.92</i>
TOTAL	\$30,874,452.00	\$30,874,452.00





Lower Colorado River Multi-Species Conservation Program

Balancing Resource Use and Conservation

FY2017 Proposed Work Plans

Program Administration	\$ 1,418,074
Fish Augmentation	\$ 1,905,000
Species Research	\$ 3,358,000
System Monitoring	\$ 3,310,000
Conservation Area D&M	\$ 13,991,000
Post Development Monitoring	\$ 1,885,000
AMP	\$ 1,740,000
Remedial Measures Fund	\$ 1,108,828
Public Outreach	\$ 125,000
TOTAL	\$ 28,840,902
Land and Water Fund Contributions	\$ 2,100,000
TOTAL Proposed FY2017 Work Plans	\$ 30,940,902

