

# Lower Colorado River Multi-Species Conservation Program



*Balancing Resource Use and Conservation*

## LOWER COLORADO RIVER MULTI-SPECIES CONSERVATION PROGRAM



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



# Lower Colorado River Multi-Species Conservation Program



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## LCR MSCP FY2011 Funding Summary

FY2011 Total Required Funding	FY2011 Approved Estimate	FY2011 Actual Obligations	Cumulative Program Accomplishment
\$32,800,140	\$33,674,938	\$23,969,176.43	\$105,020,674.53



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## FY2011 Program Element Accomplishment

Program Administration	\$ 1,138,509.80 (5%)
Fish Augmentation	\$ 1,371,222.72 (6%)
Species Research	\$ 2,576,822.95 (11%)
System Monitoring	\$ 2,776,126.36 (12%)
Conservation Area D&M	\$ 8,716,922.35 (36%)
Post Development Monitoring	\$ 1,083,198.46 (4%)
AMP	\$ 870,621.96 (4%)
Habitat Maintenance Fund	\$ 5,359,500.00 (22%)
Public Involvement	\$ 76,251.83 (*%)
<b>TOTAL</b>	<b>\$23,969,176.43</b>



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## 2011 Restoration Accomplishments

**3 Stand Alone Conservation Measures**

**13 Conservation Areas (9 + 4 potential)**





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**AMM2**  
(Topock Marsh)

FY10 \$1,000,000 Expended  
FY11 No Actions  
FY12 \$2,500,000 IA Complete  
FY12 FWS Concurrence



**FTHL**  
(Yuha Desert ACEC)

FY11 160 acres acquired  
FY12 80 acres acquired  
FY12 FWS Concurrence



**Desert Tortoise**  
(Chuckwalla Bench ACEC)

FY10 completed & closed



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## 2011 Planting Accomplishments

Palo Verde Ecological Reserve:	220 acres of CW
Cibola Valley Conservation Area:	89 acres of honey mesquite
<b>TOTAL:</b>	<b>309 acres</b>



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## Acreage through 2011

## Land Cover Established

Beal Lake:	107
Palo Verde Ecological Reserve:	759
Cibola Valley Conservation Area:	670
Hart Mine Marsh:	255
Imperial Ponds Conservation Area:	92
Cibola NWR, Unit 1:	270
Big Bend Conservation Area:	<u>15</u>
<b>GRAND TOTAL:</b>	<b>2,168 acres</b>





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Laguna





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## 2012 Development

Palo Verde Ecological Reserve:	226 acres of cottonwood-willow
Beal Lake	9 acres of marsh/cottonwood-willow
Hunters Hole:	<u>36 acres of cottonwood-willow</u>
<b>TOTAL:</b>	<b>271 acres</b>

## 2013 Development

Palo Verde ER:	36 acres of honey mesquite (last one)
Cibola NWR Unit #1:	<u>80 acres of cottonwood-willow</u>
<b>TOTAL:</b>	<b>116 acres</b>



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## 2011 Wildlife Accomplishments

Theresa Olson  
LCR MSCP Wildlife Group Manager

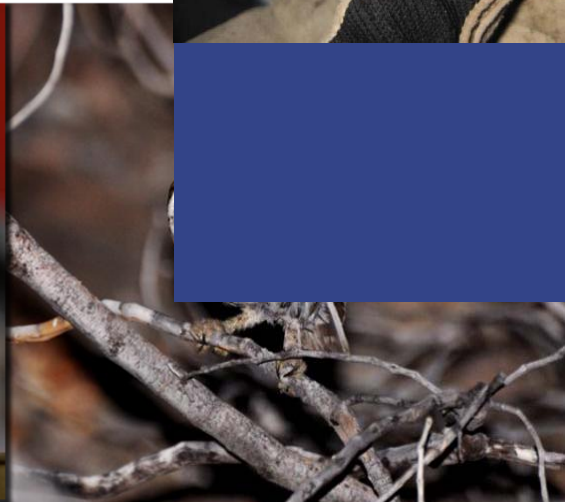
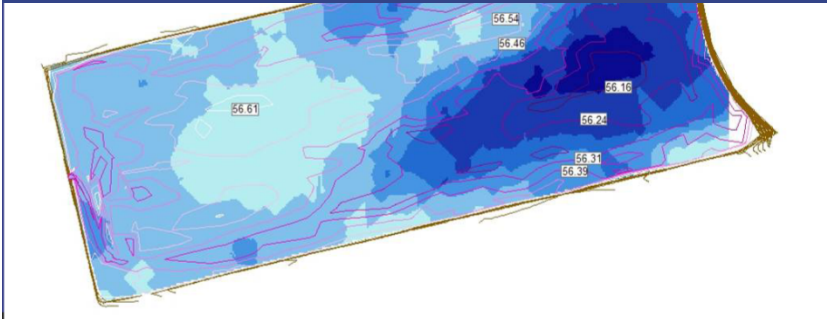


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## SPECIES RESEARCH





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- Completed Elf Owl Detectability Study and Developed a System-Wide Survey Protocol
- Completed Regional Yellow-billed Cuckoo Habitat Model
- Completed a Study on Managed Marshes at Imperial NWR for Black Rail and Clapper Rail
- Completed a Hydrology Study for Yellow-billed Cuckoo and Southwestern Willow Flycatcher
- Completed Lab Tests on Soil Amendment Study and Initiated a Field Soil Amendment Study using Data from Lab Tests
- Initiated a Western Red Bat and Western Yellow Bat Roosting Characteristics Study
- Initiated a Population Demographic and Habitat Use Study of California Leaf-nosed Bat using Genetic Analysis



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**SYSTEM MONITORING**



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- Marsh Bird Surveys Detected up to 76 Clapper Rail per Survey Period, up to 50 Least Bitterns, and 7 Black rail detections.
- SWFL Presence/Absence Surveys conducted at 64 sites with over 90 breeding adults and over 50 nestlings identified. Nest Success was 42%.
- MAPS was conducted at three sites: Beal Lake, Cibola NWR Unit #1, CVCA with a total capture of 593 birds including 3 LCR MSCP Species (Yellow Warbler, Summer Tanager, Arizona Bell's Vireo).
- Riparian Bird Monitoring was conducted at 80 Survey Plots, 155 species were recorded including LCR MSCP covered species (Yellow Warbler, Gila Woodpecker, Summer Tanager, Vermilion Flycatcher, Arizona Bell's Vireo).





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- ▶ Yellow-billed cuckoo surveys were conducted at 50 sites including all LCR MSCP Conservation Areas. Cuckoos were detected 292 times and nested at Beal Lake, PVER, CVCA, Cibola NWR Unit #1 with 29 nests located.
- ▶ Cotton rats were monitored and located near the Yuma area, PVER, Cibola NWR Unit #1, CVCA, Areas within Havasu NWR.
- ▶ Lowland Leopard Frog and Colorado River Toad Surveys were conducted and Colorado River Toads located at Planet Ranch.
- ▶ Four permanent Anabat Stations continue to operate with all four LCR MSCP bat species detected. Outflight counts were conducted at several mines and California Leaf-nosed bat populations remain steady, while there is a decline in Townsends big-eared bats.



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## **Big Bend Conservation Area**

- 4 LCR MSCP covered species

## **Beal Lake Conservation Area**

- 13 LCR MSCP Covered Species

## **Palo Verde Ecological Reserve**

- 11 LCR MSCP Covered Species

## **Cibola Valley Conservation Area**

- 8 LCR MSCP Covered Species

## **Cibola NWR Unit #1**

- 12 LCR MSCP Covered Species

## **Imperial Conservation Area**

- 5 LCR MSCP Covered Species



**Post-Development Monitoring**

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## 2011 Fisheries Accomplishments

April 28, 2011

Eric T. Volkman  
LCR MSCP Fisheries Group Manager





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## Fish Augmentation

Stocked 25,598 razorback

Stocked 7,122 bonytail



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## Historical Fish Augmentation

Year	Razorback	Bonytail
2005	17,017	6,941
2006	29,062	8,111
2007	21,114	9,137
2008	19,433	5,189
2009	24,299	6,579
2010	22,476	4,993
2011	25,598	7,122

**Total**                      **158,999**                      **48,072**

**Total Augmentation**                      **104,012**                      **48,072**



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## Larval Collection

- USBR staff collected 9,938 RASU larvae
- Other agencies collected 15,080 RASU larvae
- Total of 25,018 RASU larvae collected in 2011





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## Fisheries Research Highlights 2011

C12: Repatriated RASU population estimate in Lake Mohave increased

C26: Fish reared in moving water displayed greater growth



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## Fisheries Research Highlights 2011

C33: Larger RASU appear to have higher survival rates in Reach 3

C40: RASU in Lake Mohave lakeside ponds showed higher than expected spawning success rates and genetic variability

C41: Use of artificial habitat in Davis Cove documented, preference still unknown



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## Fisheries Monitoring 2011 - D8

Wild-born RASU larvae collected in Lake Meade

Recent successful recruitment in Lake Mead  
suspected

68 BONY were contacted in Lake Havasu





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FY2013 Work Plan and Budget



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## FY2013 Funding Requirements\*

(Preliminary Inflation Rate = 1.249%)

Funding Entity	FY2013 Contributions	FY2013 Adjusted Contributions
<b>Federal</b>	<b>\$17,198,730.00</b>	<b>\$17,198,730.00</b>
<b>Non-Federal</b>	<b>\$17,198,730.00</b>	<b>\$17,198,730.00</b>
<i>California</i>	<i>\$ 8,599,365.00</i>	<i>\$ 9,459,301.50</i>
<i>Arizona</i>	<i>\$ 4,299,682.50</i>	<i>\$ 2,579,809.50</i>
<i>Nevada</i>	<i>\$ 4,299,682.50</i>	<i>\$ 5,159,619.00</i>
<b>TOTAL</b>	<b>\$34,397,460.00</b>	<b>\$34,397,460.00</b>



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## FY2013 Proposed Work Plans

Program Administration	\$ 1,271,482
Fish Augmentation	\$ 1,959,000
Species Research	\$ 5,129,000
System Monitoring	\$ 2,965,000
Conservation Area D&M	\$11,825,000
Post Development Monitoring	\$ 1,410,000
AMP	\$ 1,500,000
Habitat Maintenance Fund	\$ 8,460,734
Public Involvement	\$ 100,000
<b>TOTAL</b>	<b>\$34,620,216</b>

