

Work Task F2: Avian Use of Conservation Areas

FY12 Estimate	FY12 Actual Obligations	Cumulative Expenditures Through FY12	FY13 Approved Estimate	FY14 Proposed Estimate	FY15 Proposed Estimate	FY16 Proposed Estimate
\$210,000	\$375,849.49	\$926,845.22	\$220,000	\$220,000	\$220,000	\$220,000

Contact: Beth Sabin, (702) 293-8435, lsabin@usbr.gov

Start Date: FY05

Expected Duration: FY55

Long-term Goal: Conduct pre- and post-development monitoring for avian species.

Conservation Measures: MRM1, MRM2 (ELOW, GIFL, GIWO, VEFL, BEVI, YWAR, SUTA).

Location: Beal Lake, Havasu NWR, Arizona; Palo Verde, California; Cibola Valley, Arizona; Cibola Unit 1, Cibola NWR, Cibola, Arizona; Laguna Division, Arizona; Yuma East Wetlands, Arizona; Parker Dam, California and Pretty Water, California.

Purpose: Monitor avifauna use of habitat conservation areas to provide data for the adaptive management process and develop management guidelines for created habitat conservation areas. Collect pre-development data on areas that will be converted to more favorable habitat to compare bird use between existing low quality habitat to created high quality habitat.

Connections with Other Work Tasks (past and future): Post-development and pre-development avian monitoring will be conducted at habitat conservation areas listed in section E. In addition, information obtained from this work task may be used to provide data to avian system monitoring by using the same protocols established in the system monitoring program (D6).

Project Description: Creation of riparian habitat will benefit LCR MSCP covered avian neo-tropical migratory species. Conservation areas will be monitored for bird activity, using the same sampling plan and field protocol as in system wide surveys; the double sampling area search method using intensive and rapid area search surveys. Data gathered will be used to guide the design of future riparian habitat conservation areas to provide covered species habitat.

Previous Activities: Pre- and post-development monitoring for avian covered species has been conducted at habitat conservation areas since 2005. Post-development monitoring for avian covered species has occurred at Cibola Unit 1, Palo Verde, Beal Lake, and Cibola Valley. Avian pre-development monitoring has been conducted at Cibola Valley, Hart Mine Marsh, Cibola Unit 1, Imperial Ponds, Palo Verde and Laguna

Division. Avian use has been summarized and evaluated for each conservation area and compared between conservation areas.

The same sampling plan and field protocol, the rapid and intensive area search surveys that was developed for system wide monitoring in 2007 has been used in most of the pre and post development monitoring that has occurred.

FY12 Accomplishments: Avian post-development monitoring was conducted at existing habitat conservation areas in 2012. The following habitat conservation and demonstration areas were surveyed: 1) Beal Lake, 2) Cibola Unit 1, 3) Cibola Valley, 4) Palo Verde and 5) Yuma East Wetlands. The same sampling plan and field protocol as in system wide surveys; the double sampling area search method using intensive and rapid area search surveys was used.

Each conservation area or phase surveyed was divided into area search plots approximately 9 to 15 ha in size. The plots were stratified by conservation area and habitat type (tall woody and low woody). Seventy-four area search plots were created which encompassed all existing habitat at all habitat conservation areas except a portion of Beal Lake. Rapid area search surveys were conducted on 71 plots and intensive area search surveys were conducted on a random subsample of four of those plots. The three plots at Yuma East Wetlands were only surveyed intensively.

There were 94 pairs of breeding birds comprising 16 species detected at Beal Lake. This included seven pairs of Sonoran yellow warblers, 10 pairs of Arizona Bell's vireos, and one summer tanager pair. There were 234 pairs of breeding birds comprising 23 species detected at Cibola Unit 1. This included four pairs of Sonoran yellow warblers and one Arizona Bell's vireo pairs. There were 256 pairs of breeding birds comprising 23 species detected at Cibola Valley. This included 4 pairs of Sonoran yellow warblers and 2 pairs of summer tanagers. There were 334 pairs of breeding birds comprising 22 species detected at Palo Verde. This included five pairs of Sonoran yellow warblers.

Funds were pre-obligated in FY12 for work expected in FY13; thus, FY13 obligations should decrease.

FY13 Activities: Avian post-development monitoring will be conducted at conservation and demonstration areas, including Beal Lake, Cibola Unit 1, Cibola Valley, Palo Verde and Yuma East Wetlands. Avian pre-development monitoring will be conducted at Sharks tooth and Parker Dam. Surveys will be conducted using the same sampling plan and field protocol that is being used in system wide surveys.

Proposed FY14 Activities: Avian post-development monitoring will be conducted at conservation and demonstration areas, including Beal Lake, Cibola Unit 1, Cibola Valley, Palo Verde, and Yuma East Wetlands and additional pre-development areas where needed. Surveys will be conducted using the same sampling plan and field protocol used in previous years.

Pertinent Reports: The following reports are posted on the LCR MSCP website:
Summary Report on the Lower Colorado River Riparian Bird Surveys, 2008-2010;
Report on the Lower Colorado River Riparian Bird Surveys 2011; and *A Sampling Plan*
for Riparian Birds of the Lower Colorado River—Final Report.