

## Work Task F2: Avian Use of Conservation Areas

FY10 Estimates	FY10 Actual	Cumulative Accomplishment Through FY10	FY11 Approved Estimate	FY12 Proposed Estimate	FY13 Proposed Estimate	FY14 Proposed Estimate
\$170,000	\$114,944.30	\$665,110.08	\$170,000	\$210,000	\$220,000	\$220,000

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**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; ‘Ahakhav Tribal Preserve, Arizona; PVER, California; CVCA, Cibola Unit #1, Cibola NWR, Cibola, Arizona.

**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.

**Connections with Other Work Tasks (past and future):** Post-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 (D1, D2, D5, D6, and D7).

**Project Description:** Creation of riparian habitat will benefit nine LCR MSCP covered avian neo-tropical migratory species. Conservation areas will be monitored for bird activity, using a variety of techniques including area searches and species-specific survey protocols. 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 five habitat conservation areas: Cibola Unit #1, ‘Ahakhav Tribal Preserve, PVER, Beal Lake, and CVCA. Avian pre-development monitoring has been conducted at four habitat conservation areas: CVCA, Hart Mine Marsh, Cibola Unit #1, and PVER. Avian use has been summarized and evaluated for each conservation area and compared between conservation areas.

**FY10 Accomplishments:** Avian post-development monitoring was conducted at existing habitat conservation areas, including Beal Lake, Cibola Unit #1, CVCA and PVER in 2010. The following habitat conservation areas were surveyed: 1) Beal Lake, 2) Cibola NWR Unit #1, 3) CVCA and 4) PVER.

Avian post-development monitoring was conducted utilizing the intensive area search methodology. The methodology followed the same protocol developed as part of avian system-wide monitoring under D6. Each area or phase surveyed was divided into area search plots. Each area search plot was surveyed eight times during the breeding season. A complete census of breeding birds was obtained for each area search plot.

Area search surveys conducted at Beal Lake detected 143 pairs of breeding birds. This included 12 pairs of Sonoran yellow warblers, 20 pairs of Arizona Bell's vireos, and 2 summer tanager pairs.

Surveys conducted at Cibola Unit #1 detected 77 pairs of breeding birds. This included 5 pairs of Sonoran yellow warblers and one Arizona Bell's vireo pair. Surveys conducted at CVCA detected 356 pairs of breeding birds. This included 3 pairs of Sonoran yellow warblers. Surveys conducted at PVER detected 117 pairs of breeding birds. This included 4 pairs of Sonoran yellow warblers.

**FY11 Activities:** Avian post-development monitoring will be conducted at existing habitat conservation areas, including Beal Lake, Cibola Unit #1, CVCA, and PVER. Pre-development monitoring will occur at the Laguna Conservation area.

Instead of doing only intensive area searches on the habitat conservation area, a double sampling technique utilizing rapid and intensive area searches will be used in 2012 and subsequent years using the same protocol developed as part of the avian system-wide monitoring under D6. The change was made because as the total acreage of habitat conservation areas under the LCR MSCP increase annually, surveying all habitat using intensive area searches will no longer be feasible.

**Proposed FY12 Activities:** Avian post-development monitoring will be conducted at existing conservation areas, including Beal Lake, Cibola Unit #1, CVCA, PVER, Laguna Conservation Area, and pre-development surveys in additional areas where needed.

**Pertinent Reports:** *Final Summary of Monitoring Efforts at Pratt Agricultural Restoration Site, 1999-2006* is posted on the LCR MSCP website. *Summary Report on the Lower Colorado River Riparian Bird Surveys, 2008-2010* will be posted when available.