

## Work Task D7: Yellow-Billed Cuckoo Presence/Absence Surveys

FY13 Estimate	FY13 Actual Obligations	Cumulative Expenditures Through FY13	FY14 Approved Estimate	FY15 Proposed Estimate	FY16 Proposed Estimate	FY17 Proposed Estimate
\$550,000	\$413,612.30	\$3,956,087.63	\$650,000	\$750,000	\$750,000	\$750,000

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**Start Date:** FY06

**Expected Duration:** FY55

**Long-term Goal:** Acquire yellow-billed cuckoo data as part of the system monitoring program.

**Conservation Measures:** MRM1, MRM2 (YBCU).

**Location:** General presence/absence surveys are conducted in approximately 55 sites of suitable habitat within the LCR MSCP project boundary.

**Purpose:** Conduct surveys to determine existing yellow-billed cuckoo (YBCU) populations along the LCR from the Grand Canyon to the Southerly International Boundary with Mexico and monitor long-term trends.

**Connections with Other Work Tasks (past and future):** Work Task C37 measured the hydrologic conditions preferred by southwestern willow flycatcher and yellow-billed cuckoo.

**Project Description:** Yellow-billed cuckoos utilize cottonwood-willow habitat and may act as an umbrella species for other covered avian species that use these habitats. Existing yellow-billed cuckoo populations and habitat are being determined along the LCR as systematic surveys are conducted over the project area. This work task assesses existing yellow-billed cuckoo populations and evaluates required habitat characteristics. Data collected on vegetation characteristics of occupied sites are used to design habitat creation sites for YBCU and recommend future demographic studies necessary to understand more about the YBCU populations along the LCR.

**Previous Activities:** The yellow-billed cuckoo life history and monitoring studies began in FY06. Prior to the creation of riparian habitat under the LCR MSCP, the only large breeding population of cuckoos was on the BWRNWR, with few scattered pairs elsewhere on the LCR. Within the past five years, in addition to the BWRNWR, multiple pairs of cuckoos have been confirmed breeding at PVER and CVCA with occasional

pairs at ‘Ahakhav Tribal Preserve HNWR, INWR and CNWR, in addition to detections at other sites on the LCR. Nesting has been confirmed as late as September at some sites.

**FY13 Accomplishments:** In FY13, monitoring included presence/absence surveys, nest monitoring, and banding. Surveys were conducted for yellow-billed cuckoos at 11 sites within the LCR MSCP, including restoration sites that contained appropriate habitat. The wide-ranging behavior and lack of strict territory boundaries of cuckoos precludes the confirmation of nesting with surveys alone. Instead, criteria (timing, location and persistence of all detected cuckoos) defining “possible”, “probable”, and “confirmed” nesting have been developed based on survey results combined with observed behaviors of cuckoos.

Up to 61 breeding territories were estimated within the LCR MSCP, including 37 possible, 8 probable, and 16 confirmed breeding territories. Fifty-one territories (84%) were estimated at LCR MSCP restoration sites, including 34 (56%) at PVER, 8 (13%) at CVCA and 8 at the BWR NWR (Table 1). Fifteen nests were found: 13 at PVER, 1 at BLRA and 1 at CVCA. Nine newly captured adult cuckoos were banded and one adult banded in 2011 at Cibola NWR was recaptured at PVER. Twenty-three young from nine nests were also banded. An additional 10 birds previously banded between 2009 and 2012 were resighted.

**Table 1. Breeding territories at LCR MSCP sites.**

Survey area	Area (ha)	Max estimated territories
Palo Verde Ecological Reserve	308	34
Bill Williams River NWR East	306	6
Bill Williams River NWR West	297	2
Cibola NWR	132	5
Cibola Valley Conservation Area	96	8
Ahakhav Tribal Preserve	60	1
Havasu NWR	54	3
Yuma East Wetlands	49	1
Imperial NWR	18	0
Picacho SRA	15	0
Mittry Lake	12	1
Quigley WMA	11	0

The contract was extended one year due to challenges establishing a new contract. This resulted in reduced surveys in FY13, resulting in fewer obligations.

**FY14 Activities:** A new contract was awarded in December 2013 and activities in FY14 will involve work similar to previous years.

**Proposed FY15 Activities:** Work will continue as in previous years and include presence/absence surveys, nest monitoring, banding and habitat surveys. Increased survey effort and LCR MSCP data management requirements will result in an increase in the project budget beginning in FY15.

**Pertinent Reports:** *Yellow-billed Cuckoo Distribution, Abundance, and Habitat Use on the Lower Colorado River and Tributaries, 2013 Annual Report* has been posted to the website as well as a summary report covering this work between 2008 and 2012.