

Work Task D7: Yellow-billed Cuckoo Presence/ Absence Surveys

FY14 Estimate	FY14 Actual Obligations	Cumulative Expenditures Through FY14	FY15 Approved Estimate	FY16 Proposed Estimate	FY17 Proposed Estimate	FY18 Proposed Estimate
\$650,000	\$756,988.58	\$4,633,892.52	\$750,000	\$750,000	\$750,000	\$750,000

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Start Date: FY06

Expected Duration: FY55

Long-Term Goal: System monitoring and post-development monitoring for yellow-billed cuckoo

Conservation Measures: MRM1 and MRM2 (YBCU)

Location: General presence/absence surveys are conducted in suitable habitat within the LCR MSCP project boundary.

Purpose: To conduct surveys to monitor existing yellow-billed cuckoo 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): Under Work Task C37 (closed), the hydrologic conditions preferred by southwestern willow flycatcher and yellow-billed cuckoo have been measured.

Project Description: Yellow-billed cuckoo 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. Existing yellow-billed cuckoo populations will be assessed.

Previous Activities: 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 Bill Williams River NWR, with a few scattered pairs elsewhere on the LCR. 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. Between FY08 and FY13, the majority of confirmed breeding of cuckoos

has been at the PVER, with nesting also occurring at the CVCA, Cibola NWR Unit #1, and occasionally at the 'Ahakhav Tribal Preserve, BLCA, and Imperial NWR. Nesting activity has been documented late into September at the PVER.

FY14 Accomplishments: Work in 2014 included presence/absence surveys at 40 sites along the LCR and Bill Williams River, nest monitoring, banding of young and adults, telemetry, and migration tracking with GPS.

A total of 58 confirmed breeding territories and an additional 13 probable and 30 possible breeding territories were detected in FY14. Fifty-four territories were confirmed at LCR MSCP restoration sites, 49 at the PVER (Phases 4–7), 1 at the CVCA (Phase 2), and 4 at Cibola NWR Unit #1 (Crane Roost and Nature Trail). There were four nests found at the Bill Williams River NWR. Up to 101 breeding territories were estimated within the LCR MSCP planning area. A total of 35 nests were monitored. Using the Mayfield method, nest success was estimated to be 55%.

Thirty-two new adult cuckoos and 38 nestlings were captured and banded. Nineteen of the adults were fitted with radio telemetric devices, and 7 were fitted with GPS devices. Ten previously banded adults were recaptured. Fifteen birds banded between 2009 and 2013 were re-sighted, and two of these were identified to individual. Six males and two females returned to their previous breeding sites, seven of them to the PVER and one male to Crane Roost. Of the returning birds banded as young, four returned to their natal site (the PVER), and one bird banded in 2012 at either the PVER or Cibola NWR (the unconfirmed color band matched two possible birds) was re-sighted at Havasu (the BLCA).

Monitoring costs increased, requiring additional funding to be added to this work task in FY14. It is projected that costs will remain similar through FY18.

FY15 Activities: Activities in FY15 will involve work similar to 2014. Presence/absence surveys will be conducted at 40 sites along with nest monitoring, banding of young and adults, telemetry, and migration tracking with GPS.

Proposed FY16 Activities: Activities in FY16 will involve work similar to previous years. Presence/absence surveys will be conducted at 40 sites along with nest monitoring, banding of young and adults, telemetry, and migration tracking with GPS.

Pertinent Reports: The *Yellow-billed Cuckoo Distribution, Abundance, and Habitat Use on the Lower Colorado River and Tributaries, 2013 Annual Report* has been posted on the Web site as well as a summary report covering this work between 2008 and 2012. The annual report for 2014 will be posted upon finalization.