

Work Task C35: Western Red Bat and Western Yellow Bat Roosting Characteristics Study

FY12 Estimate	FY12 Actual Obligations	Cumulative Expenditures Through FY12	FY13 Approved Estimate	FY14 Proposed Estimate	FY15 Proposed Estimate	FY16 Proposed Estimate
\$175,000	\$289,115.34	\$209,889.72	\$150,000	\$25,000	\$0	\$0

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Start Date: FY10

Expected Duration: FY14

Long-term Goal: To determine roosting characteristics for the western red bat and western yellow bat.

Conservation Measures: MRM1 (WRBA, WYBA).

Location: Within the LCR MSCP project boundary, Bill Williams River NWR, and other riparian areas where western red bats and/or western yellow bats are known to occur.

Purpose: To better define roosting characteristics for the two species using radio telemetry.

Connections with Other Work Tasks (past and future): Work tasks D9 and F4 determine the distribution of each species and determine areas in which to capture the target species.

Project Description: Radio transmitters will be attached to both western red bats and western yellow bats. These bats will then be tracked to their roosting sites (in trees) during the day to pinpoint their roosting locations. Vegetation measurements will be collected at both known roost sites as well as random non-use sites to determine whether these bat species have specific roosting characteristics. These data will be used to design habitat creation projects for these species.

Previous Activities: In FY11, preliminary mist-netting was conducted to determine likely areas where red and yellow bats could be captured both on the LCR and elsewhere. Equipment was purchased for the project.

FY12 Accomplishments: A total of eight red bats were radio-tracked at PVER and CVCA. Roosts were found for 4 of these bats, all in cottonwoods. One red bat was radio-tracked at one of the Three Links Ranch control site and a single roost was located, also in a cottonwood. A total of nine yellow bats were radio-tracked at three habitat creation

sites (Ahakhav, PVER, and CVCA). Roosts in palm trees were found for four yellow bats. None of these bats were found roosting within habitat creation areas. No yellow bats were radio-tracked at control sites. Preliminary data suggests that red bat roosting preference is based on canopy structure and patch scale habitat characteristics while yellow bats appear to be associated with specific roost tree characteristics, specifically, palm trees with a large dead palm frond skirt. Funds were pre-obligated for work expected in FY13, thus the FY13 obligations should decrease.

FY13 Activities: A third year was added to the study in order to acquire a statistically sufficient sample size. Red and yellow bats will be radio-tracked at the same sites as in FY12 in the winter and summer seasons. Roost data will be collected and the data will be analyzed for the final report.

Proposed FY14 Activities: The final report will be submitted and reviewed. Information on red and yellow bat roosting requirements and management recommendations for habitat creation areas will be included in the report.

Pertinent Reports: The study plan and FY11 and FY12 annual reports are available upon request.