Work Task F3: Small Mammal Colonization of Conservation Areas

FY16 Estimate	FY16 Actual Obligations	Cumulative Expenditures Through FY16	FY17 Approved Estimate	FY18 Proposed Estimate	FY19 Proposed Estimate	FY20 Proposed Estimate
\$65,000	\$63,377.64	\$489,264.67	\$65,000	\$65,000	\$65,000	\$65,000

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Start Date: FY05

Expected Duration: FY55

Long-Term Goal: Conduct pre- and post-development monitoring for small

mammal species

Conservation Measures: CRCR1, DPMO1, MRM2 (CRCR, DPMO, and

YHCR), and YHCR1

Location: Reaches 3–6; Beal Lake Conservation Area (BLCA), Havasu National Wildlife Refuge; Palo Verde Ecological Reserve (PVER), California; Cibola Valley Conservation Area (CVCA), Cibola National Wildlife Refuge Unit #1 Conservation Area Nature Trail, Laguna Division Conservation Area, and Yuma East Wetlands (YEW), Arizona; Reach 7; Hunters Hole

Purpose: To monitor small mammal presence within habitat creation sites

Connections with Other Work Tasks (Past and Future): Post-development small mammal monitoring will be conducted at habitat creation sites listed in "Conservation Area Development and Management (Section E)." In addition, presence information obtained from this work task will be used under Work Task C27 to document habitat characteristics and improve small mammal monitoring methods. Protocol improvements developed under Work Task C27 will be incorporated under this work task.

Project Description: Small mammal live trapping will be conducted in conservation areas to document the presence of Colorado River cotton rats (*Sigmodon arizonae plenus*), Yuma hispid cotton rats (*Sigmodon hispidus eremicus*), and desert pocket mice (*Chaetodipus penicillatus sobrinus*).

Previous Activities: Presence live trapping surveys were conducted at habitat creation sites from FY06–15. Trapping occurred for 1–3 nights at the sites sampled each year and was conducted in vegetation anticipated to provide the

best habitat to obtain detections of Colorado River cotton rats and Yuma hispid cotton rats. As of FY15, cotton rats were captured within or adjacent to all developed conservation areas except Hunters Hole. Colorado river cotton rats were captured at the Big Bend Conservation Area (BBCA), the BLCA, the Cibola National Wildlife Refuge Unit #1 Conservation Area (Cibola NWR Unit #1), the CVCA, and the PVER. All cotton rats captured at YEW and the Imperial National Wildlife Refuge were Yuma hispid cotton rats. Desert pocket mice were detected at many conservation areas, but the subspecies could not be determined.

FY16 Accomplishments: Presence live trapping surveys were conducted at the BBCA, the BLCA, the PVER, the CVCA, Cibola NWR Unit #1, YEW, the LDCA, and Hunters Hole. Colorado River cotton rats were captured at the BBCA, the BLCA, the PVER, the CVCA, Cibola NWR Unit #1, the LDCA; none were captured at the BLCA. Yuma hispid cotton rats were captured at YEW and Hunters Hole, a first for Hunters Hole. The first trapping of the LDCA occurred. One night of pre-development monitoring was conducted at the Mohave Valley Conservation Area, and desert pocket mice were captured. The subspecies of these pocket mice were not determined.

FY17 Activities: Small mammal live trapping surveys will continue as part of the post-development monitoring efforts at the BBCA, the BLCA, Cibola NWR Unit #1, Hunters Hole, the PVER, YEW, and the LDCA to detect the presence of cotton rats.

Proposed FY18 Activities: Small mammal live trapping surveys will continue as part of the post-development monitoring efforts at the BBCA, the BLCA, Cibola NWR Unit #1, Hunters Hole, the LDCA, the PVER, and YEW.

Pertinent Reports: The report titled *Post-Development and System Monitoring of Rodent Populations: 2012–2014* is available on the LCR MSCP Web site. The FY15 and FY16 reports will also be posted upon completion.