

Work Task F3: Small Mammal Colonization of Conservation Areas

FY14 Estimate	FY14 Actual Obligations	Cumulative Expenditures Through FY14	FY15 Approved Estimate	FY16 Proposed Estimate	FY17 Proposed Estimate	FY18 Proposed Estimate
\$60,000	\$56,766.91	\$372,989.29	\$55,000	\$65,000	\$65,000	\$65,000

Contact: Allen Calvert, (702) 293-8311, acalvert@usbr.gov

Start Date: FY05

Expected Duration: FY55

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

Conservation Measures: YHCR1, CRCR1, DPMO1, and MRM2 (DPMO, CRCR, and YHCR)

Location: BLCA, Havasu NWR; PVER, California; CVCA, Cibola Nature Trail, and LDCA, Arizona

Purpose: The purpose of this work task is to monitor small mammal populations within habitat creation sites. Data will be used in the adaptive management process to guide the design of future habitat creation projects targeting covered small mammal species.

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 in 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, Yuma hispid cotton rats, and desert pocket mice.

Previous Activities: Prior to 2005, small mammal surveys were conducted on Cibola NWR Unit #1 and at the Pratt Agricultural Lease site. Several cotton rats were captured at each site (Yuma hispid at Pratt and Colorado River cotton rat at

Unit #1). At the Pratt site, Yuma hispid cotton rats were captured in dense *Baccharis* spp., and at Unit #1, Colorado River cotton rats were captured in dense Johnsongrass.

Presence/absence live trapping surveys were conducted at several habitat creation sites during FY06, but only one Colorado River cotton rat was captured at the BLCA. In 2007, cotton rats were found at Cibola NWR Unit #1, the Imperial NWR, and at a reference site between Laguna Dam and Mittry Lake north of Yuma, Arizona. In 2008, one cotton rat was captured during pre-development monitoring in adjacent habitat at the Imperial NWR. A new cotton rat population was found near the PVER. During the 2009, 2010, and 2011 surveys, cotton rats were detected at Cibola NWR Unit #1 and the bench population near the PVER. In 2012, Colorado River cotton rats were found at the BBCA, BLCA, PVER, CVCA, and Cibola NWR Unit #1.

FY14 Accomplishments: Presence live trapping surveys were conducted in at the BLCA, PVER, CVCA, Cibola NWR Unit #1, BBCA, Yuma East Wetlands, and Hunters Hole. Cotton rats were captured within all conservation areas except the BLCA and Hunters Hole. All cotton rats captured at the BBCA, PVER, CVCA, and Cibola NWR were Colorado River cotton rats. All cotton rats captured at Yuma East Wetlands were Yuma hispid cotton rats.

MEFFs were finalized, and all data collected in 2014 were recorded on these forms by using a handheld GPS unit.

FY15 Activities: Presence live trapping surveys will continue as part of the post-development monitoring efforts at the BLCA, PVER, CVCA, Cibola NWR Unit #1, BBCA, Yuma East Wetlands, and Hunters Hole.

Proposed FY16 Activities: Presence live trapping surveys will continue as part of the post-development monitoring efforts at the BLCA, PVER, CVCA, Cibola NWR Unit #1, BBCA, Yuma East Wetlands, and Hunters Hole.

If appropriate habitat develops at the LDCA, this site would be surveyed as well. Funding increases in FY16 are for pre- and post-development monitoring of new conservation areas.

Pertinent Reports: Annual reports will be posted on the LCR MSCP Web site.