

Work Task F3: Small Mammal Colonization of Restoration Sites

FY08 Estimates	FY08 Actual	Cumulative Accomplishment Through FY08	FY09 Approved Estimate	FY10 Proposed Estimate	FY11 Proposed Estimate	FY12 Proposed Estimate
\$55,000	\$33,109.48	\$100,908.48	\$55,000	\$55,000	\$55,000	\$55,000

Contact: Chris Dodge, (702) 293-8115, cdodge@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, MRM2 (DPMO, CRCR, YHCR)

Location: Beal Lake, Havasu NWR; PVER, CA; CVCA, Cibola Nature Trail, Hart Mine Marsh.

Purpose: 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 Section E. In addition, information obtained from this work task, in conjunction with C27, will be used to define habitat requirements for future habitat creation projects.

Project Description: Reclamation will conduct presence/absence surveys in restoration demonstration and habitat creation sites to determine small mammal occurrence. These efforts will be focused on detecting the presence of Yuma hispid cotton (*Sigmodon hispidus eremicus*) rats and Colorado River cotton rats (*Sigmodon arizonae plenus*) at these sites. These data will be used to guide the design of habitat restoration for covered small mammal species.

Previous Activities: In previous years, small mammal surveys have been conducted at the Cibola Nature Trail site and at the Pratt Agricultural site. Several animals from the genus *Sigmodon* have been captured at each site. At the Pratt Agricultural site, *Sigmodon* spp. were captured in dense *Baccharis* spp., and at the Cibola Nature Trail site, they were captured in dense Johnsongrass. No *Sigmodon* spp. has been captured at Pratt Agricultural since 2005. Presence/absence live trapping surveys were conducted at several habitat creation sites during FY06, but only one *Sigmodon* spp. was captured at the Beal Lake Riparian Restoration site.

FY08 Accomplishments: Trapping was conducted in the fall and spring at several habitat creation sites, including PVER, CVCA, Cibola Nature Trail, and Imperial NWR. Efforts were focused on areas most likely to have *Sigmodon* spp. *Sigmodon* spp. were captured at two sites: 2

individuals were captured at Imperial NWR (E14) and 3 individuals were captured at the Cibola Nature Trail site (E24). Captured *Sigmodon* spp. had small tissue samples collected and genetically analyzed to determine species and subspecies.

FY09 Activities: Presence/absence live trapping surveys will continue as part of the post-development monitoring efforts at LCR MSCP habitat creation sites. At the Cibola Nature Trail site we will conduct trapping in arrays designed to determine density, as presence at the site has already been established. Any *Sigmodon* spp. captured will have small tissue samples collected and these samples will be analyzed to determine the species and subspecies of the animal from which the sample was collected.

Proposed FY10 Activities: Continue post-development monitoring activities for small mammals at habitat creation sites.

Pertinent Reports: A summary of mammal trapping results at LCR MSCP restoration sites 2008 will be posted on the LCR MSCP Web site.