

Work Task D10: System Monitoring of Rodent Populations

FY16 Estimate	FY16 Actual Obligations	Cumulative Expenditures Through FY16	FY17 Approved Estimate	FY18 Proposed Estimate	FY19 Proposed Estimate	FY20 Proposed Estimate
\$40,000	\$44,452.69	\$256,679.43	\$40,000	\$40,000	\$40,000	\$40,000

Contact: Jeff Hill, (702) 293-8163, jhill@usbr.gov

Start Date: FY11

Expected Duration: FY55

Long-Term Goal: System-wide monitoring to document the presence of possible source populations of LCR MSCP covered rodents along the lower Colorado River (LCR)

Conservation Measures: AMM1, AMM6, MRM2, DPMO1, CRCR1, CRCR2, YHCR1, and YHCR2

Location: System-wide along the LCR, including the Bill Williams River

Purpose: The purpose of this work task is to conduct presence surveys of Colorado River cotton rats (*Sigmodon arizonae plenus*), Yuma hispid cotton rats (*Sigmodon hispidus eremicus*), and desert pocket mice (*Chaetodipus penicillatus sobrinus*) within existing habitat along the LCR.

Connections with Other Work Tasks (Past and Future): System-wide monitoring will be used in conjunction with post-development monitoring (F3) and small mammal research (C27) to document habitat at capture locations.

Project Description: Surveys will be conducted to detect the presence of Colorado River cotton rats, Yuma hispid cotton rats, and desert pocket mice within selected areas that have potential habitat along the LCR outside LCR MSCP conservation areas. Surveys may be conducted in the extreme edges of each species' range in an attempt to document the outer limits of their respective distributions within the LCR MSCP planning area.

Previous Activities: Presence surveys were conducted in potential Colorado River and Yuma hispid cotton rat habitat within the LCR MSCP planning area from FY11 to FY15 to document each species' range and to collect genetic samples.

Colorado River cotton rats were detected in Reaches 3–4, and Yuma hispid cotton rats were detected in Reaches 6–7. Desert pocket mice were detected at many survey areas, but the subspecies cannot be determined.

FY16 Accomplishments: Small mammal live trapping surveys were conducted within previously occupied locations to document the presence of Colorado River and Yuma hispid cotton rats. The areas surveyed included Pintail Slough in the Havasu National Wildlife Refuge, the Imperial National Wildlife Refuge outside the Imperial Ponds Conservation Area, Mittry Lake near the Laguna Division Conservation Area, and the Pratt Agricultural Lease near Yuma, Arizona. One Colorado River cotton rat and four desert pocket mice were captured at Pintail Slough. Two Yuma hispid cotton rats were captured at the Imperial National Wildlife Refuge – one at Mittry Lake and three at the Pratt Agricultural Lease.

FY17 Activities: System-wide surveys will be conducted to detect the presence of Colorado River cotton rats and Yuma hispid cotton rats within selected areas that have potential habitats along the LCR outside LCR MSCP conservation areas. System-wide monitoring objectives for 2017–27 will be defined to determine the sampling design and level of effort. If potential habitats are discovered in areas that can inform LCR MSCP habitat creation, monitoring may be conducted to document Colorado River and Yuma hispid cotton rat presence.

Proposed FY18 Activities: Rodent presence surveys will be conducted to meet system-wide monitoring objectives throughout the LCR system.

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