## Work Task D9: System Monitoring and Research of Covered Bat Species

Contact:	Theresa Olson, LC-8222
Purpose:	Refine survey techniques, intervals, and standards for monitoring LCR MSCP covered bat species and implement system wide surveys for these species.
Conservation Measures:	WRBA1, WYBA1, CLNB1, PTBB1, WRBA2 and WYBA3
Long-term Goals:	The Habitat Conservation Plan outlines two conservation measures for western red bats and three for western yellow bats. Conservation measures WRBA1, WYBA1, CLNB1, PTBB1 call for surveys to be conducted to determine the distribution of these species. Development of survey protocol and standards will enable Reclamation to conduct these bat surveys effectively. In addition, conservation measures WRBA2 and WYBA3 state that 765 acres of cottonwood-willow and mesquite habitat be created for roosting habitat for these bat species. Surveys will be conducted to evaluate implementation success of these conservation measures.
FY2006 Estimate:	\$110,000. Reclamation staff will review and refine protocols and techniques (Approx. \$15,000). Full system wide surveys will be conducted via a contract or grant. Restoration site specific surveys will be conducted by Reclamation staff.
FY2007 Estimate:	\$90,000. Same as previous year.
FY2008 Estimate:	\$110,000. Same as previous year.

## **Project Description:** Indigenous bat species were surveyed annually along the LCR from 2001-2005 by Brown and Berry. Existing and recommended survey protocol will be adapted to evaluate bat use at restoration sites and to conduct system monitoring of covered bat species along the LCR. Survey protocols, including techniques, survey intervals, seasonality, etc., will be determined. Once these protocols are developed, system wide monitoring via either a contract or grant will continue. Reclamation staff will also conduct preliminary bat surveys before and after restoration utilizing Anabat, Sonabat, infrared cameras, and stationary detection equipment where appropriate and may conduct field sampling/netting to confirm bat species.

## Specific FY2006 Work Tasks:

- a) Coordinate with wildlife agencies and other interested parties to refine bat protocols developed by previous surveys completed, and to determine best approach for system wide monitoring of bat populations along the LCR.
- b) Prepare and award appropriate acquisition tool to implement protocols developed.
- c) Implement the protocol developed and monitor appropriate contracting method.
- d) Reclamation staff will also conduct preliminary bat surveys before and after restoration at sites that may include areas such as Beal Lake, Cibola National Wildlife Refuge, Cibola Valley Conservation Area, and Palo Verde Ecological Reserve when appropriate.