Work Task C18: Point Count Design and Sample Size Evaluation

FY05 Estimate	FY05 Actual	Cumulative Accomplishment Through FY05	FY06 Approved Estimate	FY07 Proposed Estimate	FY08 Proposed Estimate	FY09 Proposed Estimate
$50,000	$49,920	$49,920	$0	$0	$0	$0

Contact: John Swett, (702) 293-8574

Start Date: FY05 **Expected Duration:** FY06

Long-term Goal: Research to develop monitoring design.

Conservation Measures: MRM1 and MRM2

Location: System-wide

Purpose: System monitoring is required by the LCR MSCP to monitor existing covered species populations and their habitats. To initiate a system monitoring program for riparian obligate birds, data must be collected to determine sample size.

Connections with Other Work Tasks (past and future): This work task was previously included in the Draft FY05 Work Tasks as Point Count Design and Sample Size Evaluation (C1).

Project Description: The LCR MSCP includes 26 covered species and five evaluation species. Some individual species, such as the SWFL and the YBCU, have system monitoring programs established utilizing single species protocols. Some single species monitoring protocols have been previously established and are required by existing compliance documents subsumed under the LCR MSCP. Other single species protocols monitor species representing certain habitat types within the LCR MSCP. However, it is inefficient to monitor every covered species individually throughout the entire LCR MSCP planning area so multi-species protocols will be utilized, where applicable.

Monitoring bird populations, especially neo-tropical migratory birds within riparian habitats, is an effective way to monitor ecosystem health. Reclamation has worked with the GBBO, USGS, and other state and federal agencies to develop a system monitoring program for the State of Nevada, through Nevada Partners in Flight. By utilizing the Great Basin Bird Observatory (GBBO) monitoring protocol and design, data from the LCR can be incorporated into a larger, regional database for more powerful data analysis. Population trends can be derived over time, thus enabling Reclamation to monitor existing covered avian species and their habitat. This work task was anticipated to provide the necessary data to design an effective and efficient multi-species system monitoring program for riparian obligate avian covered species.

FY05 Accomplishments: Eighteen-point count transects were randomly selected along the LCR. Avian data was collected, utilizing the GBBO protocol, during June 2005. Vegetation at

each point count plot was characterized using the Anderson and Ohmart classification system. Point count transects were randomly placed within three vegetation types along the LCR. Six transects began in mixed saltcedar-mesquite stands, six transects began in monotypic saltcedar stands, and six transects began in cottonwood-willow stands. Transects crossed several vegetation classifications due to the small patch size typically found along the LCR. Sixty-eight avian species, totaling 2,938 individuals, were observed, including four LCR MSCP covered species.

Data were collected during 2005 to determine sample size for the riparian obligate covered avian species system monitoring program. After completion of the 2005 field work, it was determined that data collected were not sufficient to design the point count monitoring program.

FY06 Activities: Point count transects are being completed during the breeding season to provide the additional data needed to design the avian system monitoring program, using funding approved under Work Task D6. A draft program design will be completed by USGS in September 2006, with the final design anticipated by December 2006.

Proposed FY07 Activities: This Work Task will be closed in FY06. Implementation of system-wide surveys will be initiated under (D6).

Pertinent Reports: Scope of Work, detailing study design expectation, is available upon request**.** *Lower Colorado River Point Count Transects,* will be posted to the LCR MSCP website.