Work Task G1: Data Management

FY10 Estimates	FY10 Actual	Cumulative Accomplishment Through FY10	FY11 Approved Estimate	FY12 Proposed Estimate	FY13 Proposed Estimate	FY14 Proposed Estimate
$650,000	$484,297.71	$1,443,767.49	$700,000	$700,000	$950,000	$950,000

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Start Date: FY07

Expected Duration: FY55

Long-term Goal: Data management will be an ongoing task for species research, system monitoring, habitat creation, post-development monitoring, and habitat maintenance programs.

Conservation Measures: All.

Location: System-wide.

Purpose: Develop and maintain an accessible, multi-disciplinary, spatially referenced, relational database to consolidate, organize, document, store, and distribute scientific information related to the LCR MSCP.

Connections with Other Work Tasks (past and future): Database management is integral in the successful completion of work tasks undertaken for Fish Augmentation (Section B), Species Research (Section C), System Monitoring (Section D), Habitat Creation (Section E), Post-Development Monitoring (Section F), Adaptive Management (Section G), and Habitat Maintenance (Section H).

Project Description: To fully implement the LCR MSCP, a database management system is being developed to manage data collected through the species research, system monitoring, habitat creation, post-development monitoring, adaptive management, and habitat maintenance programs. Database design, initial implementation, and maintenance are funded through this work task.

Previous Activities: All RASU and BONY tagging and stocking data have been included in the Lower Colorado River Native Fishes database. The LCR MSCP Database Management Framework Requirements Analysis was completed in FY06, and outlined several options for implementing an accessible, multi-disciplinary, spatially referenced, relational database to consolidate, organize, document, store, and distribute scientific information related to the LCR MSCP. This analysis will be used to develop the implementation strategy for the LCR MSCP database management system.

FY10 Accomplishments: Hardware was purchased to increase data storage for the implementation of the centralized database. The intranet/document/calendar management system was maintained and modified, for future needs of the LCR MSCP. Implementation of remote data collection from field data loggers began at Beal Lake. The automatic collection of remote data into a centralized database allows for the secure transmission of data with integrated quality control to support mission critical projects. The native fish database was maintained.

FY11 Activities: Database and software development will be conducted in FY11. Database design and implementation of a centralized Database Management System (DBMS) will continue in an annually phased approach for all project and species databases. The planning, acquisition, and data modules for the MSCP centralized database will begin development. All data modules will be phased in according to priority for the implementation of the HCP. Data modules consist of an application for input of data (data entry) within a centralized database, to include quality assurance and quality control. The intranet/document/calendar management system (SharePoint 2010) will be upgraded and modified to work with all data modules. The development of remote data collection from field data loggers will continue. Development of a new LCR MSCP website will begin. Development of a new internet web interface for the fish database will also begin and will be accessible through LCR MSCP's website. The LCR MSCP data management requirements document will be developed to provide standards in handling and processing data for input into the LCR MSCP DBMS.

Work will continue on the archiving the Minckley library; document processing will continue and additional requests for copyright clearances will be made until blanket copyright permissions have been secured with primary publishers. All digitized versions of library documents will continue to be organized using bibliographic software, and error checking will be performed to ensure consistency and accuracy. An online archive holding all digital versions of documents found within the library will be developed. An inventory of all reprint library holdings, and instructions on how to access, search, download, save, and print individual documents in the library will also be provided.

Proposed FY12 Activities: Database and software development will continue. Database design and implementation of a centralized Database Management System (DBMS) will continue in an annually phased approach for all project and species. The planning, acquisition, and data modules for the MSCP centralized database development will continue. The development of remote data collection from field data loggers will continue. Update and maintenance of a new LCR MSCP website will continue. Development of a new internet web interface for the fish database will also continue and will be accessible through LCR MSCP's website.

Pertinent Reports: *Draft LCR MSCP Database Management Framework Requirements Analysis* is available upon request.