I. Title of Proposal: **Database Management**

II. Relationship to RIPRAP: V.A.1 Conduct interagency data management program to compile, manage, and maintain all research and monitoring data collected by the Recovery Program.

III. Study Background/Rationale and Hypotheses

Development of a centralized database was an initial requirement for formation of the Recovery Implementation Program. An important component of the centralized database is the data collected under the Interagency Standardized Monitoring Program.

IV. Study Goals, Objectives, End Product:

A. Goal: Maintain a current, computerized database of all fishery data collected from the Upper Colorado River Basin using funds from the Colorado River Recovery Program.
B. Objectives:

Database Management.

1. Compile and provide documentation for all fishery data collected in the Upper Colorado River Basin under the auspices of the Colorado River Recovery Program.
2. Update Database Management System (DBMS) and DBMS handbook as necessary.
3. Assist cooperators with database management.

Interagency Standardized Monitoring Program: coordination and reporting.

1. Determine trends in the populations of the endangered fishes.
2. Determine the efficacy of management actions intended to aid in the recovery of the species.
3. Assist in the establishment of definitive recovery goals.
4. Monitor trends in populations of selected sympatric species.

C. End Product: Current database of fish data collected under the Recovery Program.

V. Study area: Upper Colorado River Basin

VI. Study Methods/Approach: As per Database Management Handbook.

VII. Task Description and Schedule

Database Management

1. Continue to review 'old' data to eliminate errors from the database.
2. Catalog and distribute PIT tags to cooperators for use in tagging endangered fishes during studies funded by the Recovery Program (except for propagation activities).
3. Review all tagging files as they are entered into the DBMS for potential errors.
4. Compile and distribute an annual list of all endangered fish tagged during studies funded by the Recovery Program (except during propagation activities restricted to rearing facilities).
5. Compile and distribute an annual list of all data files contained in the DBMS. Provide basic descriptions of the data files.
6. Receive, catalog, and document all data files submitted by researchers in the Recovery Program.
7. Update on an annual basis the list of field names used by researchers that submit data files to the DBMS.
8. Update on an annual basis the documentation included with all files in the DBMS.
9. Provide technical support to all cooperators in the Recovery Program.
10. Coordinate with program participants to assess possible changes in software or data handling relative to recent advances in technology

Interagency Standardized Monitoring Program

11. Maintain the Interagency Standardized Monitoring Program Database.

Individual investigators keypunch monitoring program data into files with established format and submit them to the database manager. The data are double checked for errors and combined into appropriate files. Data on samples preserved during YOY Colorado pikeminnow monitoring are added to the files after the information is provided by the Larval Fish Laboratory.

12. Revise the ISMP Handbook to include changes recommended by the Biology Committee in 2000.

The Interagency Standardized Monitoring Program has been in a state of flux for several years. Recent decisions by the Biology Committee involve eliminating shoreline electrofishing for Colorado pikeminnow and fall trammel netting for humpback chub in favor of regular population estimates of both species in all rivers where they occur. However, shoreline seining for YOY Colorado pikeminnow will continue. The handbook will be modified to reflect those changes.

Specific methodologies for population estimates for all endangered species in all river reaches will be added as they are developed.


14. Produce and distribute an annual consolidated report for YOY Colorado pikeminnow monitoring (fall backwater seining).


VIII. FY-2001 Work

Deliverables/Due Dates

Maintain Interagency Monitoring Program Database and Upper Colorado River Basin database management system; summarize data; provide annual listing of all files contained in the Upper Basin database; provide an annual listing of all PIT-tagged fish captured and released in the upper basin. June 2001

Produce and distribute an annual consolidated report for YOY Colorado pikeminnow monitoring (fall backwater seining). June 2001

Produce a final report summarizing results of the adult Colorado pikeminnow shoreline electrofishing portion of the monitoring program from 1986 through 2000. October 2001

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PIT tags (2,000 @ $4) $ 8,000 (cost for PIT tags needs to be included in CAP-7)

FY-2002 Work

Deliverables/Due Dates: same as FY-2001 except that adult Colorado pikeminnow ISMP will be complete

Budget reduced by $10,000 because adult ISMP no longer done.

IX. Budget Summary

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X. Reviewers Various Service and Recovery Program staff.

XI. References