I. Project Title: **Upper Basin Database**

II. Principal Investigator(s):

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III. Project Summary:

Development of a centralized database was a requirement of the Recovery Program when it was formed in 1986. All researchers and hatcheries who receive funding through the Recovery Program are required to submit all fishery data to the central database at the completion of their study or rearing season. This mandates that all researchers are required to submit a complete list of all endangered, native and non-native fish handled each year to the central database. Guidelines for the annual tagging list are circulated to researchers each year. A consolidated tagging list is compiled and distributed after tagging data are received from all researchers.

Most of the UCRB database consists of the all fish data collected during the different investigations funded by the Recovery Program. These data relate to species, number, collection date, site, gear, effort expended, habitat and any other parameter associated with collection or stocking of that fish. Field fish-collection data, radiotelemetry data, stationary Passive Integrated Transponder (PIT) tag reader data, and program funded propagation data are required to be submitted. The Recovery Program does not require submitting data from invertebrate, geomorphology, hatchery or laboratory studies. All fishery data associated with a study are due to the database when the final report is approved by the Recovery Program.

The database manager checks each file to ensure that the data conform to the required format and prepares one page of documentation for each file received. The documentation includes name of principal contact, river where data were collected, year of data collection, a brief summary of the study design, description of the data file itself (i.e. field names and description of contents, data codes, etc), and a list of the major reports or publications that are associated with the data file. Future users will be referred to the reports for a complete description of the study design and conclusions of the original researchers.

The database manager also distributes PIT tags to researchers as they request them and maintains a list of all tags and who they are distributed to. PIT tag lists submitted by researchers are compared with this database to identify transcription errors. All errors can not be corrected, but at least a few errors can be eliminated before they are

included in the basin-wide tagging list. Other errors are corrected when they are identified.

IV. Study Schedule: Scheduled to continue for the length of the Recovery Program.

V. Relationship to RIPRAP: General Recovery Program Support Action Plan.

V.A.2. Conduct interagency data management program to compile, manage, and maintain, all research and monitoring data collected by the Recovery Program.

VI. Accomplishment of FY 09 Tasks and Deliverables, Discussion of Initial Findings and Shortcomings:

Database Management

PIT tags have been distributed as researchers and hatchery managers have requested them. An Access database is maintained documenting distribution of all PIT tags that are sent to investigators in both the Upper Basin and San Juan Recovery Programs.

All tagging databases (stocking and river) are up to date through 2008. PIT tagging data from 2009 should be coming in during the next month or so. Tagging data from 2009 will be updated over the coming winter. All tagging and stocking databases have been converted to Access. We worked with Karen Holt to provide data for an online database that is available to researchers looking for information on specific PIT tag numbers or general information of distribution of rare fish.

Efforts have begun to start bringing the other fish data into consolidated Access files. They currently reside in a variety of Excel, Dbase, and Quattro Pro files. This will be a more complicated process because of the wide variety of data types that fall into this broad category. Access is a more complicated program than the spread sheets currently used, but will ultimately be much more useful for the recovery program.

Efforts in 2009 concentrated on providing a consolidated database of all the nonnative fish data that has been accumulated since 2000. These consolidated data will play an important role in ongoing efforts to synthesize this important program in all rivers of the upper basin. This data has been updated through 2008 and have been handed over to CSU, the contract holder for the basin wide synthesis. Razorback sucker data have been updated through 2008 and have been submitted to Koreen Zelasko (with CSU) for additional survival estimation. Additionally, efforts were made to consolidate the YOY Colorado pikeminnow monitoring data for a long term analysis. Data from the now terminated adult monitoring program were also consolidated into an Access file.

Investigators are not as good at submitting the 'other fish' data as the rare fish data, so we need to update that information. We have been working with researchers to incorporate the more recent data. In addition, we need to update the list of studies

that have data included in the database. Work on updating the database is ongoing.

VII. Recommendations: Continue the transition to Access. Continue to search for data to add to the database.

VIII. Project Status: Project is currently behind schedule, but is catching up. Scheduled to continue through the length of the Recovery Program.

IX. FY 08 Budget

A.	Funds Provided:	$ 42,302
B.	Funds Expended:	$ 42,302
C.	Difference:	$ 0
D.	Publication Charges:	$ 0

X. Status of Data Submission: Tagging data from 2009 should be coming in soon.

XI. Signed: T.A. Francis, November 9, 2009