

COLORADO RIVER RECOVERY PROGRAM  
FY 2009 ANNUAL PROJECT REPORT

RECOVERY PROGRAM  
PROJECT NUMBER: 128

- I. Project Title: Abundance Estimates for Colorado pikeminnow in the Green River Basin, Utah and Colorado
  
- II. Principal Investigator(s):  
Lead Agencies: Larval Fish Laboratory, CSU

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Jointly Submitted by: Larval Fish Laboratory, CSU, Utah Division of Wildlife Resources, U.S. Fish and Wildlife Service, Colorado Division of Wildlife

III. Project Summary: Sampling conducted during this project is designed to obtain capture-recapture data needed to estimate abundance of Colorado pikeminnow *Ptychocheilus lucius* in the lower Yampa and lower White rivers and the Green River downstream of Whirlpool Canyon exclusive of Split Mountain Canyon. Abundance estimates of endangered Colorado pikeminnow are needed to better monitor population status and provide benchmarks against which progress toward recovery can be measured. This project is designed to have three years (2006-2008) of sampling followed by a year of data analysis and report writing. The design is essentially the same as that employed for sampling conducted from 2000-2003 in the same area (Bestgen et al. 2005). Sampling during this study began in spring 2006, and continued in spring 2008, with the Colorado Division of Wildlife and the Larval Fish Laboratory responsible for sampling the Yampa River, the U. S. Fish and Wildlife Service, Vernal, responsible for the reach of the Green River from the White River downstream to Tusher Diversion and the lower White River, and the Utah Division of Wildlife Resources responsible for the Green River reaches from lower Whirlpool Canyon to the White River confluence and from Tusher Diversion downstream to the Colorado River. The Larval Fish Laboratory will provide coordination, data checking, and data analysis assistance. Our primary goal was to capture, mark, and recapture as many Colorado pikeminnow as possible on at least three different sampling occasions in each river reach. Sampling occurred during spring runoff and mostly ended before pikeminnow spawning migration. Electrofishing was the primary sampling gear. Captured pikeminnow were scanned for the presence of a PIT tag, and unmarked fish were marked. These data were used to obtain abundance estimates for each river reach. We also began an analysis of razorback sucker recapture data to further the understanding of demographic rates such as survival for stocked fish.

IV. Study Schedule:           Initial Year   2006  
  Final year    2009

V. Relationship to RIPRAP (*Version: March 8, 2000*):

Monitor populations and habitat and conduct research to support recovery actions (research, monitoring, and data management)

V.B. Conduct research to acquire needed life history information

V.B.2. Conduct appropriate studies to provide needed life history information.

VI. Accomplishment of FY 2009 Tasks and Deliverables, Discussion of Initial Findings and Shortcomings:

We completed data screening and quality control in April 2009, and preliminary analyses. We then completed data analyses, including abundance estimation in August-September 2009. We wrote a draft report (July-September) and submitted it for Program and co-author review on 29 September 2009. We received comments back and are incorporating those into an updated draft which will be sent to the Biology Committee and peer reviewers, by mid-November.

We (Gary White) also completed data analysis for Doug Osumundson in 2008-2009. That report has been finalized.

We also finished the survival rate analysis of historical razorback sucker data and submitted a final report. The subsequent analysis of more recently collected data is ongoing but was separated from this scope of work and project in spring 2009.

VII. Recommendations: Finish Colorado pikeminnow abundance estimation final report and submit for review by Biology Committee.

VIII. Project Status: Nearly completed, draft report submitted, and is being revised for submission to the Biology Committee.

IX. FY 2009 Budget Status

A. Funds Provided: \$38,623

B. Funds Expended: \$35,000

C. Difference: \$3,623, report reviews need to be finalized.

D. Percent of the FY 2009 work completed, and projected costs to complete: 95% complete, no additional funds needed to finish project.

E. Recovery Program funds spent for publication charges: None

X. Status of Data Submission (Where applicable):

PIT Tag data files were submitted by individual agencies (USFWS, UDWR) in January 2009.

XI. Signed: Kevin R. Bestgen 10 Nov. 2009  
Reporting Principal Investigator Date