

I. Project title:

Development of a channel catfish control program in the lower Yampa River.

II. Principal Investigator(s):

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III. Project Summary:

The goal of this project is to reduce the abundance of adult channel catfish to minimize predatory and competitive impacts to endangered humpback chub, Colorado pikeminnow, razorback sucker and bonytail in the lower Yampa River (rm 46-0). To evaluate program efficiency, the river was stratified into ten removal reaches of approximately equal length. Within these reaches five additional monitoring reaches (each one mile long) were selected to evaluate the fish community response to catfish removal. During the first electrofishing pass of the year all fish collected from the monitoring sites were identified, weighed and measured (the natives were returned to the river alive and the nonnatives deposited on the banks). Thereafter, channel catfish was the target species collected, measured and removed from the study area. When flows receded below 1,000 cfs (mid-June) electrofishing was no longer possible and the method of removal became angling. In 2002, a total of 2,471 channel catfish were removed during two electrofishing passes, one volunteer angling pass and two volunteer-assisted hiking trips.

IV. Study Schedule:

a: Initial year: FY 2001
b: Final year: FY 2003

V. Relationship to RIPRAP:

GREEN RIVER ACTION PLAN: YAMPA AND LITTLE SNAKE RIVERS

III. Reduce negative impacts of nonnative fishes and sportfish management activities (nonnative and sportfish management)

III.A.1.c Control channel catfish

III.A.1.c(1) Remove channel catfish in Yampa Canyon

VI. Accomplishment of FY02 Tasks and Deliverables, Discussion of Initial Findings and Shortcomings:

The lowest water levels recorded in the lower Yampa occurred in 2002 and reduced the number of removal trips planned for that year. Our last opportunity to electroshock the Yampa Canyon was June 17th, and by June 30th water levels had dropped to 150 cfs (no access by boat). Instead of making five sampling passes (3 electrofishing and 2 angling), only two electrofishing passes and one full angling pass were accomplished. Two prescheduled volunteer angling trips (one full pass) were cancelled. However, angling continued during two late-summer hiking trips into the canyon. The hiking trips (July 16–19 and August 20–23) allowed us to observe the river during flows below 10 cfs. Main channel water temperatures as high as 30^oC were recorded yet no major fish kills were observed. Restricted access into the canyon resulted in fewer catfish removed as compared to previous years.

During the first and second electrofishing passes (May 28–30 and June 10–13), 528 and 541 channel catfish were removed respectively from the study area. The mean length of channel catfish removed by electrofishing in all ten removal reaches was 302 mm. Fish composition was sampled and recorded at five monitoring sites during the first electrofishing pass. The most abundant fishes captured with electrofishing gear from monitoring sites were natives (Figure 1).

During the first angling pass 884 catfish were removed and another 518 removed during the two hiking trips. Smallmouth bass represented an unexpected 58.5% (303 fish averaging ~ 195mm) of the angling catch during the late summer hiking trips. The mean length of channel catfish removed by angling was 262mm. Total channel catfish taken from the lower Yampa River in 2002 was 2,471.

VII. Recommendations :

We recommend that removal efforts of channel catfish from the Yampa River in DNM be continued as prescribed in the SOW, which has been revised to include additional removal with fyke nets at the extreme upper and lower reaches of the canyon. Large fyke nets (4'x4' diameter frame with 1" mesh) will be used to collect catfish for three continuous weeks near Deerlodge Park and at Echo Park during June.

VIII. Project Status :

This project continues through 2003.

IX. FY 02 Budget Status :

	<u>Total</u>
A. Funds Provided:	\$112,000
B. Funds Expended:	\$112,000
C. Difference:	0
D. Percent of the FY 2002 work completed, and projected costs to complete:	N/A
E. Recovery Program funds spent for publication charges:	0

X: Status of Data Submission:

Data have not been submitted to the database manager. Data are being entered into dBASE files and will be submitted to the program database manager upon completion of the study.

XI. Signed: Mark H. Fuller
Principal Investigator

December 9, 2002
Date

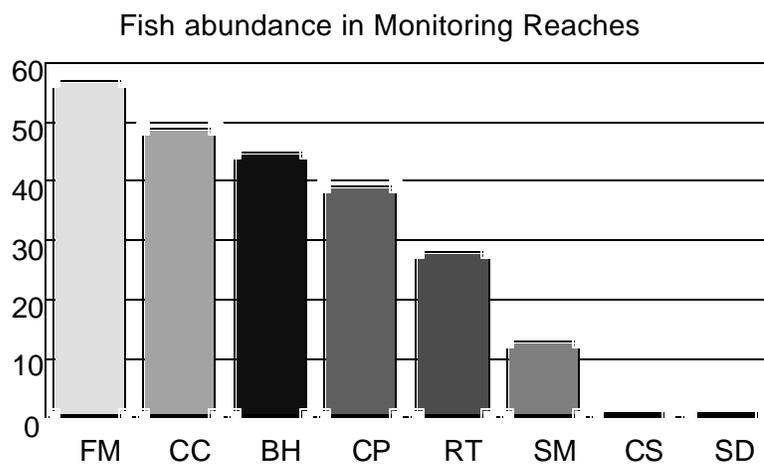


Figure 1. Cumulative fish abundance in five monitoring reaches in the lower Yampa River. Monitoring sites were selected in areas where humpback chub had been previously collected and identified during electroshock sampling.