

**COLORADO RIVER RECOVERY PROGRAM
FY-2007 PROPOSED SCOPE OF WORK**

Project No.: 124

Duchesne River riffle habitat measurements

Lead Agency: U. S. Fish and Wildlife Service
Colorado River Fishery Project

Submitted by: Sam Finney, Fishery Biologist
U.S. Fish and Wildlife Service
Colorado River Fishery Project
1380 South 2350 West
Vernal, UT 84078
Phone (435) 789_0351 ext. 16
Fax (435) 789_4807
sam_finney@fws.gov

Date: February 13, 2007

Revised: 30 September 2002 (revised 10/4/02 by Pat Nelson; revised 10/9/02 by Mark Fuller and Pat Nelson); 24 February 2003; 28 February 2003, 16 April 2003; 9 April 2003 by Mark Fuller; 16 May 2003; 6/18/03; 10/7/03 by Pat Nelson; 9 February 2004 by Mark Fuller; 2/17/04 by Pat Nelson; 3 February 2005 by Dave Irving; February 7, 2006 by Sam Finney; 13 February 2007

Category:

- Ongoing project
- Ongoing_revised project
- Requested project
- Unsolicited proposal

Expected Funding Source:

- Annual funds
- Capital Funds
- Other

I. Title of Proposal: Duchesne River rifle habitat measurements

II. Relationship to RIPRAP:

Green River Action Plan: Duchesne River

I.G. Evaluate and revise as needed, flow regimes to benefit endangered fish populations

III. Study Background/Rationale and Hypotheses

Recent base flow recommendations (Haines and Modde 2003) identified passage needs for endangered fish in the Duchesne River. The goal of these recommendations was to establish Colorado pikeminnow usage of the Duchesne

River at historical numbers. Flows are needed to provide ample water for passage, productivity, and habitat requirements of Colorado pikeminnow. Haines and Modde (2003) showed a discharge of 115 CFS preserves most riffle habitat and provides fish passage. Base flow model predictions (noted in the Haines and Modde report as imprecise extrapolations) were ground truthed in 2006 (Finney 2006). The report noted, however, that the hydraulic control was not always the shallowest point in the riffle.

IV. Study Goal:

Goal - Examine riffle habitat depths at base flows.

V. Study area: Lower Duchesne River (Confluence with Uinta River, rmi 17) to confluence of the Green River on the Northern Ute (Ute) Indian Reservation.

VI. Study Methods/Approach:

Riffles measured in Haines and Modde (2003) and Finney (2006) will be reexamined. Measurements will be taken at low flows (<150 CFS). Photographs will be taken and wetted width, and cross sectional profile will be measured. Discharge will be recorded at the time of the measurements.

VII. Task Description and Schedule

Task 1. August 2007: Measure and photograph riffle habitats.

Task 2. November 2007 through January 2008: Prepare annual report for the Program.

VIII. FY-2007 Work:

Deliverables/Due Dates: Annual report November 2007

References

Finney, S. T. 2006. Nonnative Fish Removal, Fish Community Structure, and Riffle Habitat Measurements in the Duchesne River. RIP Annual Report Meeting. Vernal, Utah.

Haines, G. B., and T. M. Modde. 2003. Base flow needs for endangered fish in the Duchesne River. Final Report for the Recovery Implementation Program for Endangered Fish Species in the Upper Colorado River Basin. UCRBRIP Project No. 84-5, U.S. Fish and Wildlife Service, Denver, Colorado.

Budget:

Field Labor

Project Biologist (GS-11 Step 4 at \$423/10 hr day for 3 days)	\$1,269
Biological Technician (GS-8 Step 5 at \$326/10 hr day for 3 days)	\$978

Travel \$350

Total \$2,597