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

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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:       Expected Funding Source:
      __ Ongoing project                 X  Annual funds
      ___ Ongoing revised project
      ___ Requested project
      ___ Unsolicited proposal

I. Title of Proposal: Duchesne River riffle 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.


VIII. FY-2007 Work:

Deliverables/Due Dates: Annual report November 2007

References


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