

**UPPER COLORADO RIVER
ENDANGERED FISH
RECOVERY PROGRAM**

**FISCAL YEAR 2010 & 2011
PROGRAM GUIDANCE**

April 2, 2009

INTRODUCTION1

RECOVERY ELEMENTS AND NEW PROJECT DESCRIPTIONS4

ONGOING AND ONGOING-REVISED PROJECT DESCRIPTIONS BY RECOVERY
PROGRAM ELEMENT:See Excel budget table file.

APPENDICES

 FY 2010–2011 PROPOSED SCOPE OF WORK FORM

 SCOPE OF WORK BUDGET DETAIL REQUIREMENTS

INTRODUCTION

This is the guidance for development of the Recovery Program's FY 2010-2011 Work Plan. The Program Director's office developed this guidance on the basis of the Recovery Program's Recovery Action Plan (RIPRAP) and input from Program participants and was subsequently reviewed, modified, and approved by the Program's technical and Management committees (the Implementation Committee delegated review and approval to the Management Committee). The RIPRAP identifies all the activities currently believed necessary and feasible to recover the endangered fish in the Upper Basin. Thus, annual Program guidance is closely tied to the RIPRAP.

Like the RIPRAP, the guidance is organized by recovery element. In the accompanying Excel budget tables, guidance is provided for ongoing and ongoing-revised projects within each recovery element. Ongoing projects are those previously approved for out-year funding for which goals/objectives, methods, cost, and expected outcome have not changed significantly. Scopes of work for these projects should require only minor updates. Ongoing-revised projects are those previously approved for out-year funding for which goals, objectives, methods, cost, or expected outcome have changed significantly (as outlined in the guidance), thus their scopes of work may require more changes. Program guidance for new projects is provided in this document. New projects are those not previously approved for out-year funding and completely new scopes of work will need to be developed for these. In some cases, this will involve a formal request for proposals (RFP) developed by the Bureau of Reclamation.

This FY 2010-2011 guidance requests proposals for FY 2010-2011 activities; proposed scopes of work are requested for each of the projects listed in the Excel budget tables accompanying this guidance (with the exception of any new starts requiring RFP's). Scopes of work should be prepared according to the format provided. Please review this format carefully, especially the explanatory text printed in italics. Scopes of work which do not contain the information and budget detail requested will be returned to the principal investigator for revision. This could prevent the scope from receiving FY 2010-2011 funding consideration because of the tight work plan development schedule.

Scopes of work for new, ongoing, and ongoing-revised biological and water acquisition projects (under recovery elements I-V) are due to the Program Director's office NO LATER THAN Thursday, April 30, 2009 (this includes scopes of work for capital-funded projects). Submit ongoing-revised, and ongoing scopes of work for these projects to the appropriate Program coordinator (see list near end of this section) in Word 2003 format by electronic mail. IN ADDITION, submit a courtesy electronic or hard copy of ongoing-revised biological scopes of work to each member of the Biology Committee and water acquisition scopes of work to each member of the Water Acquisition Committee (see lists at end of this section). If you wish, you may provide this courtesy copy by posting it to the fws-coloriver listserv. (The technical committees do not need to see ongoing scopes of work until later in the work plan review process, and these will be sent to them by the Program Director's office.)

For your information, the evaluation form used by the Recovery Program in reviewing and commenting on final draft project reports, the proper format for final draft reports that are

submitted to the Biology Committee for review and approval, and the Biology Committee review process for final draft reports may all be found at <http://www.r6.fws.gov/crrip/rfdoc.htm>. Scopes of work for information & education projects (under recovery element VI) also are due April 30 2009, and should be submitted in Word 2003 format to Debbie Felker (debbie_felker@fws.gov).

Program management scopes of work (under recovery element VII) are due by July 1, 2009 (in Word 2003 format by electronic mail to angela_kantola@fws.gov).

A NOTE ABOUT INFLATION: The Program's FY 2010 and FY 2011 base budgets are likely to be very similar to FY 2009, due to declining economic inflation (and perhaps even deflation). Therefore, principal investigators are cautioned to carefully consider the need for and clearly justify any increases in project budgets from 2009 to 2010 and 2011. Of course, this relates to *inflationary* increases, not other salary increases that are part of agency policies.

Upon receipt of the proposed scopes of work, the Program Director's office will begin working (with technical committees and principal investigators) to review and refine the scopes of work and develop a recommended technical annual work plan. This recommended work plan and refined scopes of work will be submitted by the Program Director to the technical committees for review on June 19. Technical committee comments are then due to the Program Director and the Management Committee by July 15. The recommended Program management work plan also is due from the Program Director to the Management Committee at this time. The Management Committee will meet by mid-August to discuss the recommended work plans and approve projects for the FY 2010-2011 Work Plan (The Implementation Committee may delegate their review and approval to the Management Committee). The FY 2010-2011 scopes of work will be posted to the web by first quarter of FY 2010 (scopes of work for new starts and some nonnative fish management scopes of work may be delayed, however). If you have any questions about this guidance or the FY 2010-2011 work plan development process, please contact Angela Kantola at 303/969-7322, ext 221, or the appropriate coordinator:

Instream flow protection –Jana Mohrman 303/236-4486, jana_mohrman@fws.gov

Habitat restoration –Tom Czapla (fish passages and screens) 303/969-7322 ext. 228, tom_czapla@fws.gov and Tom Chart (floodplain restoration) 303/969-7322, ext. 226, tom_chart@fws.gov.

Nonnative fish control – Tom Chart 303/969-7322, ext. 226, tom_chart@fws.gov

Genetics and propagation, monitoring/research/life history - Tom Czapla 303/969-7322 ext. 228, tom_czapla@fws.gov – Tom Chart (floodplain restoration) 303/969-7322, ext. 226,

Information, education, and public involvement - Debbie Felker 303/969-7322 ext. 227, debbie_felker@fws.gov

Program management - Angela Kantola 303/969-7322 ext. 221, angela_kantola@fws.gov

Biology Committee e-mail list:

aaron_webber@fws.gov
bob_burdick@fws.gov
capron@wapa.gov
christopherkeleher@utah.gov
dave_irving@fws.gov
dean.riggs@state.co.us
doug_osmundson@fws.gov
dspeas@uc.usbr.gov
gene@cuwcd.com
h2orus@waterconsult.com
hayse@anl.gov
jana_mohrman@fws.gov
jhawk@lamar.colostate.edu
john_wullschleger@nps.gov
jshiel@seo.wyo.gov
JayG@utetribes.com
kbestgen@cnr.colostate.edu
kelagory@anl.gov
kevinchristopherson@utah.gov
krissywilson@utah.gov
Kevin.Gelwicks@wgf.state.wy.us
leisamonroe@utah.gov
melissa_trammell@nps.gov
michelle_morgan@fws.gov
Pete.Cavalli@wgf.state.wy.us
robert_muth@fws.gov
sherman.hebein@state.co.us
tildon_jones@fws.gov
tom.nesler@state.co.us
tom_chart@fws.gov
tom_czapla@fws.gov
travis_francis@fws.gov
trinahedrick@utah.gov
Valdezra@aol.com
wdavis@ecoplanaz.com
zaneolsen@utah.gov
angela_kantola@fws.gov

Water Acquisition Committee e-mail list:

builenberg@uc.usbr.gov
gene@cuwcd.com
h2orus@waterconsult.com
jana_mohrman@fws.gov
jshiel@seo.state.wy.us
luecke5@comcast.net
MattLindon@utah.gov
michelle.garrison@state.co.us
randy.seaholm@state.co.us
rnorman@uc.usbr.gov
rtenney@crwcd.org
Robert_Muth@fws.gov
tiseman@tnc.org
tom_chart@fws.gov
angela_kantola@fws.gov

I. INSTREAM FLOW IDENTIFICATION AND PROTECTION

Instream flow activities in FY 2010 and 2011 will be directed toward: 1) ongoing flow and temperature monitoring and hydrology support; 2) augmenting flows in the Colorado, Yampa and Gunnison rivers to help meet Service flow targets; and 3) evaluating flow recommendations (as identified in the Green River Study plan 2007 and the 2003 Strategic Plan for Geomorphologic Research and Monitoring).

II. HABITAT RESTORATION

The goal of Habitat Restoration is to provide and protect habitat necessary to both achieve and sustain endangered fish recovery. Currently there are three major thrusts under this element of the Recovery Program.

1. Re-open access to historically occupied river sections by restoring fish passage at the following migration barriers:
 - a. Redlands Diversion Dam (selective passage completed 6/96)
 - b. Grand Valley Irrigation Company Diversion (nonselective passage completed 1/98; Obermeyer gate installed in 2006)
 - c. Price-Stubb Diversion Dam (nonselective passage completed 4/08)
 - d. Grand Valley Project Diversion Dam (selective passage completed 8/04)
 - e. Tusher Wash Diversion Dam (dropped from further consideration; deemed unnecessary)
 - f. Yampa River diversion structures (dropped from further consideration; deemed unnecessary)

2. Install fish screens to prevent entrainment of endangered fishes into diversion canals.
 - a. Redlands Diversion Dam (completed 8/05)
 - b. Grand Valley Irrigation Company Diversion (completed 4/02; modified 3/04)
 - c. Grand Valley Project Diversion Dam (completed 8/05)
 - d. Tusher Wash Diversion Dam (dependent on Utah and Green R. Canal Co's decision on whether to raise the dam)
 - e. Yampa River diversion structures, if deemed necessary

3. Restore or enhance natural floodplain functions that support endangered fish recovery.

III. REDUCE NONNATIVE FISH AND SPORTFISH IMPACTS

Nonnative fish management activities in FY 2010–2011 will be directed primarily toward: 1) removal/control of problematic nonnative fishes from river reaches occupied by the endangered fishes; 2) evaluation of control efforts; 3) evaluation of species response to nonnative fish management activities; and 4) identification of sources of problematic nonnative fishes.

IV. PROPAGATION & GENETICS MANAGEMENT

The goals of Propagation and Genetics management are: to prevent immediate extinction of any endangered Colorado River fish stocks; to conserve genetic diversity of wild endangered fish stocks through recovery efforts; to maintain genetic diversity in captive-reared endangered fish broodstock that is similar to that of the wild stock used as founders; and to produce genetically sound offspring for augmentation efforts.

V. RESEARCH, MONITORING, & DATA MANAGEMENT

Population estimates were originally designed to provide 3 years of information and then allow the population to rest. For Colorado pikeminnow, the schedule is now 3 years of sampling followed by 2 years of rest, then repeating. For humpback chub, the schedule is now 2 years of sampling followed by 2 years of rest, then repeating.

Population estimates schedule since 1998 by calendar year and projected.

Species/River	98	99	00	01	02	03	04	05	06	07	08	09	10	11	12
C. pikeminnow/ Colorado River															
C. pikeminnow/ Green River			*												
Humpback Chub/ Yampa										Captive					
Humpback Chub/ Desolation/Grey										s	o	s	o		
Humpback Chub/ Black Rocks										s	o	s	o		
Humpback Chub/ Westwater										s	o	s	o		
Humpback Chub/ Cataract															

* Only the Middle Green River was sampled in 2000; sampling the entire Green River began in 2001.

Research means we will attempt to bring humpback chub from the Yampa population into captivity. The "s" and "o" stand for September and October, respectively, demonstrating the overlap in Federal fiscal years.

NEW PROJECTS (Note: Scopes of work are NOT being solicited for new starts at this time, but the PD's office will be working with Program participants to consider the following potential new starts.)

FY10 New Start:

TITLE: REMOTE SENSING OF RAZORBACK SUCKER NEAR A SPAWNING BAR IN THE GREEN RIVER.

RIPRAP Item Number: Green River: V.D. Conduct population estimate for razorback sucker.

Rationale/Problem Statement:

Hatchery raised and stocked razorback sucker have been detected and monitored through telemetry, along with wild razorback sucker, at the Jensen spawning bar (Modde et al. 2005). Stocked fish have been implanted with the 134.2 kHz Passive Integrated Transponder (PIT) tag since 2004. Flat plate antenna technology is designed to work with 134.2 kHz PIT tags and should be able to remotely detect fish when they swim above the antenna.

Project Goals and Objectives:

The goal is to place flat antenna technology on the Jensen spawning bar to remotely detect stocked razorback sucker.

Expected Products: A final report identifying the numbers of stocked fish that were detected on the spawning bar.

Recommended Approach/Methods:

The narrowest width of the river over the spawning bar appears to be approximately 40 m (130 ft; determined from Modde et al. 2005). The flat plate antennas are 27" x 13" outer dimensions. If an array of antennae are aligned across this narrow, then 6 flat plate antennae could capture almost 10% of the width. The antennae should be deployed by 15 April 2010 and left until 15 June 2010.

Schedule: FY10–11

Cost: \$5,000 per year for O&M (funds may be received for installation of this and other passive PIT-tag monitoring arrays in 2009 as part of the economic stimulus package).

Literature Cited:

Modde, T., Z.H. Bowen, and D.C. Kitcheyan. 2005. Spatial and temporal use of spawning site in the middle Green River by wild and hatchery-reared razorback sucker. Transactions of the American Fisheries Society 134: 937–944.

FY10 New Start:

TITLE: UPPER COLORADO RIVER BASIN RAZORBACK SUCKER MONITORING PROGRAM.

RIPRAP Item Number: Green River: V.D. Conduct population estimate for razorback sucker.

Rationale/Problem Statement:

Development of a razorback sucker monitoring plan is expected to be completed in 2009. The implementation of that plan or portions of that plan should be implemented in 2010.

Project Goals and Objectives:

The goal is to begin to monitor razorback sucker at various life stages to assess the recovery of the species.

Expected Products: Annual report on the portion of the plan that is implemented.

Recommended Approach/Methods:

Identify portions of the razorback sucker plan that can be implemented and collect the necessary information. Razorback monitoring would be done to coincide with sampling schedules for Colorado pikeminnow population estimates to minimize impacts to fish, if possible. Sampling would be basin-wide (not just on the Green River).

Schedule: FY10 and out years

Cost: \$30,000.

FY10 New Start:

TITLE: UPPER COLORADO RIVER BASIN BONYTAIL MONITORING PLAN

RIPRAP Item Number:

Rationale/Problem Statement:

Develop a bonytail monitoring plan in 2010 for implementation (all or a portion) in 2011.

Project Goals and Objectives:

The goal is to begin to monitor bonytail at various life stages to assess the recovery of the species.

Expected Products: Monitoring plan; annual reports on the portion of the plan that are implemented.

Recommended Approach/Methods: Consider bonytail use of habitat structure; also consider what information might be gained through PIT-tag arrays.

Schedule: FY10 and out years

Cost: TBD.

VI. INFORMATION, EDUCATION, & PUBLIC INVOLVEMENT

A strategic, multi-faceted information and education program is being implemented to: develop public involvement strategies at the beginning of any and all projects; educate target audiences (including the public and elected officials) about endangered fish and increase their understanding of and support for the recovery of these fish at local, state and national levels; provide opportunities for the public to participate in activities that support recovery; and improve communication and cooperation among members of the Recovery Program.

VII. PROGRAM MANAGEMENT

Program management activities for FY 2010-2011 focus on continued planning and coordination of Program activities by the Program Director and staff and by Utah, Colorado, Wyoming, and the Bureau of Reclamation. All of these projects are ongoing.

**COLORADO RIVER RECOVERY PROGRAM
FY 2010-2011 SCOPE OF WORK for:**

Project Number: _____

[Show brief title of project here]

Lead agency:

Submitted by: *[Give name of project manager, give name, address, phone, fax, e-mail of principal investigator]*

Date Last Modified: 4/3/2009 3:01:00 PM *[This field is set to update automatically.]*

Deleted: 3/10/2009 3:32:00 PM

Category:

- Ongoing project
- Ongoing-revised project
- Requested new project
- Unsolicited proposal

Expected Funding Source:

- Annual funds
- Capital funds
- Other *[explain]*

- I. Title of Proposal:
- II. Relationship to RIPRAP: *[Action plan(s), task number(s) and title(s) in the most recent RIPRAP which are correlated with this project. See RIPRAP at <http://www.fws.gov/mountain-prairie/crrip/riprap/RIPRAPMarch31-08.pdf>]*
- III. Study Background/Rationale and Hypotheses: *[If applicable] [Include description of expected study results and how those results will be integrated into the overall recovery effort.]*
- IV. Study Goals, Objectives, End Product(s): *[Include measurable outcomes and their expected due dates.]*
- V. Study Area: *[Including river miles and sampling dates, if appropriate]*
- VI. Study Methods/Approach: *[Provide a clear description of sampling methods, gear types, numbers and life stages of fish to be collected, statistical analyses to be used, etc.]*
- VII. Task Description and Schedule:
- VIII. Deliverables, Due Dates, and Budget by Fiscal Year: *[A NOTE ABOUT INFLATION: The Program's FY 2010 and FY 2011 budgets are likely to be very similar to FY 2009, due to declining economic inflation (and perhaps even deflation). Therefore, principal investigators are cautioned to carefully consider the need for and clearly justify any increases in project budgets from 2009 to 2010 and 2011.]*

FY 2010

Deliverables

Budget *[Broken out by task and funding target; see budget detail example requirements, attached]*

- Labor
- Travel
- Equipment

- Other

FY 2011

Deliverables

Budget [*Broken out by task and funding target; see budget detail example requirements, attached*]

- Labor
- Travel
- Equipment
- Other

FY 2012, etc (for multi-year study)

- IX. Budget Summary: [*Provide total AND break-out by funding target (e.g. station)*]*
- X. Reviewers: [*For new projects or ongoing-revised projects, list name, affiliation, phone, and address of people who have reviewed this proposal.*]
- XI. References:

* Do NOT include overhead costs on funds transferred from Reclamation to the Service.

Scope of Work Budget Detail Requirements

Budgets should be broken down by task, category (at least labor, travel, supplies, and equipment) and funding target. Under "labor," please identify: the type of labor (e.g., project manager, technician, secretary, etc.), the labor rate (per day, per week, or whatever calculation your office uses), and the expected amount of effort (expressed in terms of hours or weeks). If supplies exceed 5% of the project budget, please explain those costs. All equipment expenses for any single item \geq \$1,000 should be itemized and justified.

A NOTE ABOUT INFLATION: The Program's FY 2010 and FY 2011 budgets are likely to be very similar to FY 2009, due to declining economic inflation (and perhaps even deflation). Therefore, principal investigators are cautioned to carefully consider the need for and clearly justify any increases in project budgets from 2009 to 2010 and 2011. Of course, this relates to *inflationary* increases, not other salary increases that are part of agency policies.

Example:

FY 2010 Costs:

<u>Task 1</u>	<u>Agency A</u>	<u>Agency B</u>	<u>Contractor</u>	<u>Total</u>
<u>Labor</u>				
Proj. mgr (\$1833/wk; 3 wks @ agency A, \$1800/wk; 2 wks @ agency B)	\$5,500	\$3,600	\$0	\$9,100
Technicians (10 wks per agency; \$810/wk @ agency A; \$900/wk @ agency B)	\$8,100	\$9,000	\$0	\$17,100
<u>Travel</u>				
Per diem (20 days)	\$600	\$700	\$0	\$1,300
Vehicle (20 days)	\$1,200	\$1,500	\$0	\$2,700
<u>*Equipment</u>				
Boat	\$0	\$12,000	\$0	\$12,000
Trailer	\$0	\$6,000	\$0	\$6,000
Motor	\$0	\$2,000	\$0	\$2,000
Electrofishing Unit	\$0	\$4,000	\$0	\$4,000
Supplies	\$700	\$800	\$0	\$1,500
Task subtotal	\$16,100	\$39,600	\$0	\$55,700

*Justification: Additional outfitted electrofishing boat and trailer needed for concurrent sampling in two river reaches as required by population estimate protocol. Current equipment inventory of agency B includes only one outfitted electrofishing boat and trailer.

Task 2

<u>Labor</u>				
Biologist (2 wks; \$1500/wk @agency B; contractor \$2000/wk)	\$0	\$3,000	\$4,000	\$7,000

Technician (3.5 wks @ \$900/wk)	\$0	\$3,150	\$0	\$3,150
Task subtotal	\$0	\$6,150	\$4,000	\$10,150
FY 2008 TOTAL	\$16,100	\$45,750	\$4,000	\$65,850

FY 2011 Costs:

	<u>Agency A</u>	<u>Agency B</u>	<u>Contractor</u>	<u>Total</u>
<u>Task 2</u>				
Labor				
Proj. leader (2 wks @ Agency B @ \$1800/wk; 3 wks contractor @ \$2500/wk)	\$0	\$3,600	\$7,500	\$11,100
Biologist (5 wks at each: \$1500/wk @ agency B; \$2000/wk contractor)	\$0	\$7,500	\$10,000	\$17,500
Task subtotal	\$0	\$11,100	\$17,500	\$28,600
<u>Task 3</u>				
Labor				
Biologist (4 wks @ each: \$1500/wk @ agency A&B; \$2000/wk contractor)	\$6,000	\$6,000	\$8,000	\$20,000
Proj. leader (2 wks @ each: \$1833/wk @ agency A; \$1800/wk @ agency B)	\$3,700	\$3,600	\$5,000	\$12,300
Travel				
Vehicle (5 days)	\$300	\$350	\$300	\$950
Airfare (1 trip)	\$500	\$700	\$650	\$1,850
Per diem (7 days)	\$210	\$245	\$210	\$665
Equipment	\$0	\$0	\$0	\$0
Supplies				
Tags		\$1,150		\$1,150
Glassware		\$250		\$250
Sample bottles		\$100		\$100
Task subtotal	\$10,710	\$12,395	\$14,160	\$37,265
FY 2009 TOTAL	\$10,710	\$23,495	\$31,660	\$65,865