

FY-2002 SCOPE OF WORK for:

Project #: 122

Technical Assistance: Recovery Goals, Population Estimates Workshop, Flooded Bottomlands Requirement

Lead Agency: Fish and Wildlife Service, Recovery Program Director's Office

Submitted by: Richard A. Valdez
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Date: December 21, 2001

<u>Category:</u>	<u>Expected Funding Source:</u>
<input type="checkbox"/> Ongoing project	<input type="checkbox"/> Annual or <input type="checkbox"/> O&M funds
<input checked="" type="checkbox"/> Ongoing-revised project	<input type="checkbox"/> Capital funds
<input checked="" type="checkbox"/> Requested new project	<input checked="" type="checkbox"/> Other (Section 7 funds)
<input type="checkbox"/> Unsolicited proposal	

I. Title of Proposal: Technical Assistance: Recovery Goals, Population Estimates Workshop, Flooded Bottomlands Requirement

II. Relationship to RIPRAP:

General Recovery Program Support Action Plan:

- II.A. Restore flooded bottomland habitats
- V. Monitor Populations
- VII.A.5.d. Finalize recovery goals

Green River Action Plan:

- II.A.1.a.(3) Monitor and evaluate success of flooded bottomland habitat restoration/management
- II.A.2.b. Identify and evaluate flooded bottomland sites for acquisition
- II.A.2.e. Evaluate effectiveness of land acquisition activities and provide recommendations.
- II.A.3.c. Evaluate levee removal strategy at high-priority sites
- V.B. Estimate humpback chub populations
- V.C. Estimate Colorado pikeminnow populations

Colorado River Action Plan:

- II.A.4.d. Evaluate levee removal strategy at high-priority sites
- II.A.5.a. Identify and evaluate flooded bottomland sites for acquisition
- II.A.5.e. Evaluate effectiveness of land acquisition activities and provide recommendations.
- V.B. Monitor populations per requirements in the 15-Mile Reach PBO
- V.C. Estimate humpback chub populations
- V.D. Estimate Colorado pikeminnow populations

Gunnison River Action Plan:

- II.A.2.d. Evaluate levee removal strategy at high-priority sites
- II.A.3.a. Identify and evaluate flooded bottomland sites for acquisition
- II.A.3.e. Identify and evaluate flooded bottomland sites for acquisition

III. Study Background/Rationale and Hypotheses: (1) Public comments submitted under the Federal Register NOA review period will be evaluated and responses developed. (2) Population Estimates Workshop brings species experts and statisticians together to provide input into improving statistical validity and precision of abundance estimates. A Guidance Document will be developed to support monitoring of populations during downlisting and delisting periods. (3) Area of flooded bottomlands will be determined necessary to support self-sustaining, recovered populations of razorback sucker. Models of growth and survival of young razorback suckers will be determined under variables of temperature, food supply, and predation for terrace bottomlands and depression bottomlands. This study will help to determine area of flooded bottomlands necessary to acquire for recovery of razorback sucker.

IV. Study Goals, Objectives, End Product: (1) Responses to comments on recovery goals will be developed during January and February 2002. (2) Population Estimate Workshop to be held December 6-7, 2001. A Draft Guidance Document will be developed by January 15, and finalized February 15, 2002. (3) A model of razorback sucker growth and survival in terrace and depression bottomlands will be developed jointly with the Recovery Program in January-February 2002. A draft report on required area of bottomlands will be submitted by April 1, 2002, and a final report submitted May 15, 2002.

V. Study area: Does not apply

VI. Study Methods/Approach

- (1) Review and Respond to comments on recovery goals. R. Valdez will assist Recovery Program staff to review and respond to comments on recovery goals.
- (2) Population Estimate Workshop and Guidance Document: R. Valdez will assist conducting the workshop, documenting proceedings, and developing a Guidance Document.
- (3) Determine Area of Flooded Bottomlands: R. Valdez will assist Recovery Program staff in development of a model to estimate area of flooded bottomlands necessary to recover razorback sucker. A mathematical model will be developed using empirical data on growth of razorback sucker at different temperatures, food supplies, and levels of predation. The model will be developed to accommodate key variables to enable estimation of area of flooded bottomlands necessary for recovery of razorback sucker; i.e., necessary to achieve stated demographic recovery criteria.

VII. Task Description and Schedule

Task 1: Review and Respond to Recovery Goals Comments: January - March 2002

Task 2: Population Estimate Workshop - To be held December 6-7, 2001. Draft Guidance Document developed by January 15, and finalized February 15, 2002.

Task 3: Model of razorback sucker growth and survival in terrace and depression bottomlands - January-February 2002. Draft report on required area of bottomlands will be submitted by April 1, 2002, and a final report submitted May 15, 2002.

VIII. FY-2002 Work

- Deliverables/Due Dates: See Task Description and Schedule above.
- Budget

Task 1: Review and Respond to Recovery Goals Comments

Labor	Name	Hours	Rate	Amount
	R. Valdez	200	\$75.00	\$15,000.00
Travel	Purpose	Units	Cost	
	Air-SL-Den	3	\$400.00	\$1,200.00
	Motel	12	\$100.00	\$1,200.00
	Meals	15	\$25.00	\$375.00
	Car Rent	15	\$35.00	\$525.00
Other	Purpose	Units	Cost	
	Park-SLC	15	\$10.00	\$150.00
	Copy/Mail			\$100.00
	Phone			\$100.00
	TOTAL TASK 1 ----->			\$18,650.00

Task 2: Population Estimate Workshop and Guidance Document

Labor	Name	Hours	Rate	Amount
	R. Valdez	200	\$75.00	\$15,000.00
Travel	Purpose	Units	Cost	
	Air-SL-Den	2	\$400.00	\$800.00
	Drive-Moab	1	\$500.00	\$500.00
	Motel	5	\$100.00	\$500.00
	Meals	5	\$25.00	\$125.00
	Car Rent	0	\$35.00	\$0.00
Other	Purpose	Units	Cost	
	Park-SLC	5	\$10.00	\$50.00
	Copy/Mail			\$100.00
	Phone			\$100.00
	TOTAL TASK 2 ----->			\$17,175.00

Task 3: Determine Flooded Bottomlands Necessary For RBS

Labor	Name	Hours	Rate	Amount
	R. Valdez	100	\$75.00	\$7,500.00
Travel	Purpose	Units	Cost	
	Air-SL-Den	0	\$400.00	\$0.00
	Drive-Moab Motel	0	\$500.00	\$0.00
	Meals	0	\$100.00	\$0.00
	Car Rent	0	\$25.00	\$0.00
		0	\$35.00	\$0.00
Other	Purpose	Units	Cost	
	Park-SLC	0	\$10.00	\$0.00
	Copy/Mail			\$100.00
	Phone			\$100.00
	TOTAL TASK 3 ----->			\$7,700.00
GRAND TOTAL OF TASKS 1-3-->				\$43,525.00

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\$18,650.00

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\$17,175.00

Task 3: Model of razorback sucker growth and survival in terrace and depression bottomlands - January-February 2002. Draft report on required area of bottomlands will be submitted by April 1, 2002, and a final report submitted May 15, 2002.
\$7,700.00

IX. Budget Summary
FY-2002: \$43,525
Total: \$43,525

X. Reviewers: Angela Kantola, Robert Muth, Tom Czapla, Pat Nelson

XI. References: None