

**COLORADO RIVER RECOVERY PROGRAM  
FY-2010-2011 PROPOSED SCOPE OF WORK for:  
Operations and Maintenance Mumma**

Project No.: 29d

**Lead Agencies:** Colorado Division of Wildlife  
**Submitted by:** Ted Smith (Lead) /Harry Crockett  
**Address:** Colorado Division of Wildlife  
6655 S. County Rd. 3 South  
Alamosa, CO 81101  
**Phone:** (719) 587-3392  
**Fax:** (719) 587-3393  
**E-mail:** [theo.smith@state.co.us](mailto:theo.smith@state.co.us); [harry.crockett@state.co.us](mailto:harry.crockett@state.co.us);  
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**Revised:** November 26, 2001; May 11, 2003; June 19, 2007; June 12, 2009

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

I. Title of Proposal: **Operation and Maintenance of the J.W. Mumma Native Aquatic Species Restoration Facility (NASRF).**

II. Relationship to RIPRAP:

General:

IV. Manage genetic integrity and augment or restore populations

IV.C. Operate and maintain facilities.

IV.C.4. Mumma

Green River Action Plan: Yampa and Little Snake Rivers:

IV.A. Yampa River in Dinosaur National Monument

IV.A.1. Augment or restore populations as needed.

IV.A.1.a. Develop State stocking plan for bonytail in the Yampa River

IV.A.1.a.(1) Implement stocking plan.

Colorado River: Mainstem:

IV.A.5. Develop State stocking plan for bonytail in the Colorado River from Palisade to Loma.

IV.A.5.b. Implement bonytail State stocking plan.

III. Study Background/Rationale and Hypotheses:

Since 2001, the Mumma Native Aquatic Species Restoration Facility (NASRF), Alamosa, Colorado, in a closed basin, has been put into operation by the Colorado Division of Wildlife, and offered to the Recovery Program as an alternative resource for meeting Colorado River endangered fish production needs. The NASRF offers up to six

separate ponds and six large tanks as available for growout production purposes. Mumma NASRF has been identified to annually produce approximately 5,400 bonytail.

#### IV. Study Goals, Objectives, End Product:

##### Goal:

- To provide bonytail in numbers and sizes sufficient to meet the annual stocking plan (Nesler et al 2003).

##### Objectives:

- To receive early life stage progeny of bonytail from Dexter National Fish Hatchery and Technology Center, grow-out these fish in numbers, sizes, and time frames necessary to meet the annual stocking requirements for bonytail in the State of Colorado Rivers.
- To transport these fish from Mumma NASRF as necessary, and assist in the stocking of these fish in designated river reaches in Colorado.

##### End Product:

- Production of Colorado River endangered fish species required to meet revised stocking plan objectives for designated rivers/river reaches in Colorado.
- Maintaining (via culture) Gila spp. brought in from Yampa River.
- An annual report providing details of fish received, propagated, transported off station, and maintained on station; mortalities; and propagation and treatment actions required.

#### V. Study area

Mumma Native Aquatic Species Restoration Facility (NASRF), Alamosa, Colorado.

#### VI. Study Methods/Approach

The Mumma NASRF has available up to two 0.1 acer-lined ponds, two 20' round tanks and six 8' round tanks for propagation of any feasible combination, number and size of the two listed fish species requested by the Recovery Program. The Mumma Hatchery has a construction project under way which includes 20 (45" X 45") new ponds and will be able designate up to 4 for bonytail and/or humpback chubs as needed. Depending on the requirements for maintaining separate family lots and the flexibility of marking polyculturing marked fish from multiple lots and different species (e.g. razorback sucker, humpback chub and bonytail), production capability of the NASRF will vary with annual Recovery Program objectives and expectations. Endangered fish received at the unit as larvae, fry, or fingerling-size fish will be grown using accepted culture techniques and expected annual mortality rates to produce a desired number and size of fish product for Program stocking purposes. These products will be transported to stocking or transfer locations as planned. Assistance will be provided in preparing the fish for release and distribution in target river reaches if requested and budgeted by the Recovery Program.

VII. Task Description and Schedule

1. Raise bonytail to produce 5,400 to 200 mm total length fish by fall 2011.

VIII. FY-2012 Work

-	Deliverables/Due Dates: 5,400 bonytail at 200mm avg total length by fall, 2012	
-	Budget	
	Labor	\$47,100
	Equipment maintenance/repair	\$ 3,900
	Travel/training/phone	\$ 1,250
	Feed	\$ 4,700
	Stocking/vehicle use/maintenance	\$ 2,950
	Utilities	\$15,200
	Building/grounds	\$ 2,500
	Discharge chlorine	\$ <u>4,300</u>
	Total	\$81,900

FY-2013 Work (for multi-year study)

-	Deliverables/Due Dates: 5,400 bonytail at 200mm avg total length by fall, 2013	
-	Budget	
	Labor	\$47,100
	Equipment maintenance/repair	\$ 3,900
	Travel/training/phone	\$ 1,250
	Feed	\$ 4,700
	Stocking/vehicle use/maintenance	\$ 2,950
	Utilities	\$15,200
	Building/grounds	\$ 2,500
	Discharge chlorine	\$ <u>4,300</u>
	Total	\$81,900

IX. Budget Summary

FY-2012	\$81,900
FY-2013	\$81,900

Total: \$163,800

X. Reviewers: Colorado Division of Wildlife and Recovery Program staff

XI. References

Nesler, T.P., K. Christopherson, J.M. Hudson, C.W. McAda, F. Pfeifer, and T.E. Czaplak. 2003. An integrated stocking plan for razorback sucker, bonytail and Colorado pikeminnow for the Upper Colorado River Endangered Fish Recovery Program, Addendum to State stocking plans. Upper Colorado River Endangered Fish Recovery Program, Denver, Colorado.