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

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; harry.crockett@state.co.us;
Date: May 25, 2011
Revised: November 26, 2001; May 11, 2003; June 19, 2007; June 12, 2009

Category: Expected Funding Source:
- Ongoing project
X Ongoing-revised project
- Requested new project
- Unsolicited proposal
  _ Annual funds
  _ Capital funds
  _ Other (explain)

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 $ 4,300
  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 $ 4,300
  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