

COLORADO RIVER RECOVERY PROGRAM
FY 2012 ANNUAL PROJECT REPORT

RECOVERY PROGRAM
PROJECT NUMBER: 29d

I. Project Title: J. W. Mumma Native Aquatic Species Restoration Facility
Operation and Maintenance - Colorado

II. Bureau of Reclamation Agreement Number(s): 08-FG-40-2747

Project/Grant Period: Start date (Mo/Day/Yr): 10/01/2007
End date: (Mo/Day/Yr): 9/30/2012
Reporting period end date: 9/30/2012
Is this the final report? Yes _____ No X

III. Principal Investigator(s):

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IV. Abstract:

The J. W. Mumma Native Aquatic Species Restoration Facility (Mumma), located in Alamosa, Colorado, was constructed in 2000 to facilitate the conservation of rare aquatic native species through captive propagation, genetic conservation, scientific research and public education and awareness. Currently there are ten fish species and one amphibian specie housed on the unit. Many are State Threatened, Endangered or Species of Special Concern and one, the bonytail chub (BYT), has been federally listed as endangered under the Endangered Species Act since 1980. Mumma currently produces BYT in numbers and sizes sufficient to meet the annual stocking plan of the Upper Colorado River Recovery Program (UCRRP) for BYT in the Upper Basin of the Colorado River drainage.

In the past, federally endangered Colorado pikeminnow (CPM) were produced at Mumma for stocking of the San Juan, the Gunnison and the Colorado Rivers. However, since 2006 the UCRRP has not requested CPM from Mumma. Currently, there are no CPM on unit at Mumma. In addition, Mumma received a small number of federally endangered humpback chub (HBC) in 2007. On August 5th, 2011, ten (10) HBC were transferred to The Ouray National Fish Hatchery in Utah. Currently, there are no HBC on unit at Mumma.

V. Study Schedule:

Initial Year: 2002

Final Year: 2017

VI. Relationship to RIPRAP:

General Recovery Program Support Action Plan

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.

VII. Accomplishment of FY 2012 Tasks and Deliverables, Discussion of Initial Findings and Shortcomings:

In 2010 Mumma stocked 1,017 (9.856") BYT into Butch Craig Pond and 2,813 (10.578") BYT into the Green River at Echo Park for a grand total of 3,830 BYT stocked by Mumma FY 2010. Mumma fell short of its deliverable of 5,400 BYT that year for the following reason; in 2009 Mumma received 7,500 BYT from the same lot of fish testing positive for Largemouth bass virus (LMBv) at the Dexter National Fish Hatchery (NFH). These fish were placed into quarantine at Mumma in 2010-11 and therefore the Colorado River #1 and #2 stockings were placed on hold during the 2010 calendar year pending health inspection results. BYT from all lots tested negative for viruses at Mumma on 11/16/09; 3/23/10; 9/7/10; 10/19/10; and 8/29/11 and the stocking schedule was resumed.

Note: As of October 3, 2012 Dexter is again Class A for its fish health status. As mentioned above, Dexter lost its Class A status with a positive detection for LMBv in 2010. The results of recent fish health testing, using the enhanced protocols negotiated with CA F&GD, were completed on October 3, 2012. No pathogens of concern were detected. **Additional Note:** Dexter officially changed its name to the Southwest Native Aquatic Resources and Recovery Center.

In 2011, with quarantine lifted, Mumma stocked 1,237 (11.4943") BYT into Butch Craig Pond; 1,462 (11.4943") BYT into Colorado River#2; 2,707 (9.8349") BYT into Colorado

River#2; and 2,833 (9.7567") BYT into Green River at Echo Park for a grand total of 8,239 BYT stocked by Mumma FY 2011.

In 2012, Mumma stocked 2,720 (10.26") BYT into Colorado River#2; and 2,831 (11.27") BYT into Green River at Echo Park for a grand total of 5,551 BYT stocked by Mumma FY 2012.

Fish stocked from Mumma as of August 30, 2012

<u>Species</u>	<u>Year Class</u>	<u>Fish No.</u>	<u>Fish/lb.</u>	<u>Date Stocked</u>	<u>Destination</u>
BYT	2009	2,831	2.33/lb.	08/01/12	Green River
BYT	2009	<u>2,720</u>	3.09/lb.	08/30/12	Colorado River#2
5,551 Total BYT stocked for calendar year 2012					

Fish remaining on unit as of November 1, 2012

<u>Species</u>	<u>Year Class</u>	<u>Fish No.</u>	<u>Fish/lb.</u>	<u>Impoundment</u>
BYT	2009	500	3.09/lb.	POND 2
BYT	2010	6,341	5.86/lb.	POND 1
BYT	2010	2,590	5.86/lb.	POND 2
BYT	2010	2,786	4.29/lb.	POND 3
BYT	2010	4,514	4.76/lb.	POND 4
BYT	2008	120	Broodstock	POND B1
16,851 Total BYT currently on unit at Mumma				

VIII. Recommendations:

1. To continue to refine culture techniques and dietary requirements of BYT at Mumma to meet future stocking requests of BYT into selected Colorado waters.
2. To achieve Mumma's objective as stated in the 2012 Revised Integrated Stocking Plan of the Upper Colorado River Endangered Fish Recovery Program by delivering 10,000 BYT at 250mm average total length by fall 2013.
3. To import into Colorado 13,427 BYT, averaging 96mm and 7.42g from the Wahweap SFH in Utah to Mumma in late November 2012.
4. To continue development of a BYT broodstock population at Mumma in the event the Southwest Native Aquatic Resources and Recovery Center (previously Dexter NFH) becomes positive again for LMBv.
5. To continue with anti-Platyhelminthes treatments of BYT prior to all spring and fall stockings and to inspect for LMBv and other pathogens of concern at Mumma annually.
6. To continue with the PIT tagging BYT at Mumma prior to all spring and fall stockings.
7. To stock at warmer water temperatures with the knowledge that adequate temperature units are available to allow BYT to recover from handling and hauling stress prior to the onset of coldwater, winter conditions.
8. To attempt to culture larger BYT (250 to 300 mm) FY 2013 to promote and enhance survival of BYT in the resource.
9. To provide in-tank stream flow training and conditioning of BYT at Mumma to promote

and enhance survival of BYT in the resource.

10. To attempt to match receiving water temperatures with culture water temperatures at time of stocking to promote and enhance survival of BYT in the resource
11. To investigate predator training of BYT via predation videotaping at Mumma to promote and enhance survival of BYT in the resource.

IX. Project Status: On track and ongoing.

X. FY 2012 Budget Status

- A. Funds Provided: \$81,900
- B. Funds Expended: \$81,900
- C. Difference: \$0.00
- D. Percent of the FY 2012 work completed, and projected costs to complete: 100%
- E. Recovery Program funds spent for publication charges: \$0.00

XI. Status of Data Submission (Where applicable): Not applicable

XII. Signed: Ted Smith November 1, 2012
Principal Investigator Date