

I. Project Title: **Wahweap Operation and Maintenance**

II. Bureau of Reclamation Agreement Number: #R14AP00007

Project/Grant Period: Start date: 10/01/2015
End date: 9/30/2020
Reporting period end date: 9/30/2014
Is this the final report? Yes X No _____

III. Principal Investigator(s):

Zane Olsen
Utah Division of Wildlife
P.O. Box 410286
Big Water UT 84741
435-675-3714
zaneolsen@utah.gov

IV. Abstract:

Wahweap State Fish Hatchery, located in Big Water, Utah, rears bonytail for stocking in the Upper Colorado River Basin for the Upper Colorado River Recovery Program. Wahweap also maintains a refuge population of razorback sucker brood stock for the Upper Colorado River Recovery Program.

V. Study Schedule: On going

VI. Relationship to RIPRAP:

General Recovery Program Support Action Plan

- IV Manage genetic integrity and augment or restore populations
- IV.A. Genetic management
- IV.A.4. Secure and manage genetic stocks in refugia
- IV.A.4.a Razorback sucker
- IV.A.4 Develop basin wide bonytail restoration plan and implement as approved
- IV.C. Operate and maintain facilities

VII. Accomplishment of FY 2015 Tasks and Deliverables, Discussion of Initial Findings and Shortcomings:

- Wahweap Hatchery Superintendent assisted the Recovery Program in staffing the information booth at the Colorado River Water Users Association Annual Conference, the Utah Water Users Conference was not attended because of Federal budget cuts. Wahweap Staff provided live bonytail for the display and took care of them for the duration of the meetings.

- Wahweap had a great year in bonytail reproduction and was able to transfer 36,026 fish and hold 18,783 fish for stocking in 2018. Fish were in great shape averaging 73.7 mm and 3.0g. Fish had an average fat content of 4.0, a C-factor of 2,761, and no deformities were observed in our sub sample.

Wahweap also PIT-tagged 13,427 fish in October 2014 and then stocked them in May 2015. Fish were also in great shape coming out of the winter months with a fat content of 4.0, a C-factor of 2,876 a 40% male to 60% female sex ratio, and no deformities were observed in our sub sample. Fish averaged 241.3 mm in total length and 112.4g, with over 10,000 of them >250mm.

Colorado Fish Stocked/Transfer in FY-2014

Stock Date	Contact Name	Lot #	River Name	Stocking/Transfer Location	# Stocked	Tagged
3/23/2015	Zane Olsen	140501CBBTWW02	N/A	Ouray NFH	36,026	NO
Total Number of YOY 2013 Stocked:					36,026	

5/4/2015	Zane Olsen	100501CBBT-Dexter-01	Colorado	Dewey Bridge	4,509	Yes
5/5/2015	Zane Olsen	100501CBBT-Dexter-01	Green	Green River State Park	4,479	Yes
5/6/2015	Zane Olsen	100501CBBT-Dexter-01	Green	Jensen Bridge	4,439	Yes
Total Number of Adult Fish Stocked:					13,427	

- Fish were also treated for Asian Tape worm with Praziquantel @ 2.5 mg/L for a 24-hour static bath before tagging, and no worms were observed. Fish will again be treated before stocking/transfer for confirmation.
- Wahweap used 60 bonytail (YOY 2010, 2011, 2015) for the yearly fish health inspection. Fish over all were in great shape. During this year's inspection we observed no Asian Tapeworm (*Bothriocephalus acheilognathi*). Infection across the hatchery is very low and Wahweap is working closely with Dr. Chris Wilson (State of Utah Fish Pathologist) in developing a plan to eradicate this parasite from hatchery ponds. Until the eradication, Wahweap has been instructed to treat each individual pond as a different rearing unit. Wahweap will treat prophylactically, with praziquantel all fish being stocked or transferred. Fish were given the Fish Health Approval number DWR15-076 and DWR15-077.
- Wahweap Hatchery has conducted Health Condition Profiles (HCP) on all fish stocked in FY-2014.
- PIT-tagged data was submitted to Travis Francis for the May 2015 bonytail stocking.

- Wahweap was able to provide school tours to over 1,000 students this year from Arizona, Utah, and the Navajo Nation.
- Wahweap staff worked throughout the year on maintenance of the facility and equipment.

Colorado River fish remaining on station in the fall of 2015:

Species	Year class	Number	Average Size	# of Ponds
Bonytail	2010	17,415	235.64mm	4
Bonytail	2011	34,601	221.28mm	7
Bonytail (WW)	2014	18,721	157.78mm	2
Bonytail (WW)	2015	15,161	90.46mm	1
Razorback	Brood	190	471.0mm	1
Razorback	Brood 1	636	279.53mm	1
Total Number:		86,724		

VIII. Recommendations:

Continue rearing bonytail at Wahweap to meet the stocking needs of the Recovery Program. Maintain razorback back-up brood stock. Supply either species as requested by the Recovery Program. PIT-tag bonytail in the fall and stock in the spring. Work on the eradication of Asian Tapeworm from the Wahweap Hatchery rearing facility. Evaluate some needed upgrades in facilities and fish culture equipment.

IX. Project Status:

Ongoing fish culture, propagation, and development will continue at the Wahweap State Fish Hatchery.

X. FY 2014 Budget Status

A. Funds Provided:	\$200,000
B. Funds Expended:	\$200,000
C. Difference:	\$ 0.00
D. Percent of the FY 2014 work completed:	100%
E. Recovery Program funds spent for publication charges:	\$ 0.00

XI. Status of Data Submission (Where applicable): PIT tag data will be submitted to database manager after spring stocking 2016.

XII. Signed: Zane Olsen, Principal Investigator Date 10/21/2015