

- I. Project Title: Lower Green River Razorback Sucker Larval and Young-of-Year Monitoring Pilot Study.
- II. Bureau of Reclamation Agreement Number: R09AP40904
- Project/Grant Period: Start Date: 10/01/2008
End date: 04/30/2015
Reporting period end date: 09/30/2013
Is this a final report? Yes No
- III. Principal Investigator(s): Julie Howard/Katherine Creighton
Utah Division of Wildlife Resources (UDWR)
Moab Field Station
1165 South HWY 191 - Suite 4
Moab, UT 84532
435-259-3781/3780 (fax) 435-259-3785
juliehoward@utah.gov/katherinecreighton@utah.gov
- IV. Abstract: Determining the location, timing, extent, and success of razorback sucker spawning is essential for evaluating the effectiveness of the stocking program, identifying recruitment, and guiding future management. This study was designed to determine the presence/absence, distribution, and spawn timing of young of year razorback suckers in the Green River downstream from the town of Green River. The study was prompted by increasing razorback sucker encounters, the presence of multiple age classes, and congregations of ripe razorback suckers (2001-2003 and 2006-2008; Bestgen et al 2010, UDWR unpublished data) during Colorado pikeminnow surveys. Larval razorback sucker have been successfully collected since the beginning of the project by either light trapping and/or seining.
- V. Study Schedule: Initial year 2009, ongoing.
- VI. Relationship to RIPRAP:

GENERAL RECOVERY PROGRAM SUPPORT ACTION PLAN

- V. Monitor populations and habitat and conduct research to support recovery actions (research, monitoring, and data management).
- V.A. Measure and document population and habitat parameters to determine status and biological response to recovery actions.
- V.B.2. Conduct appropriate studies to provide needed life history information.

GREEN RIVER ACTION PLAN: MAINSTEM

- V. Monitor populations and habitat and conduct research to support recovery actions (research, monitoring, and data management).
 - V.A. Conduct research to acquire life history information and enhance scientific techniques required to complete recovery actions.
 - V.D. Complete monitoring plan in FY 11 (based, in part, on recommendations from evaluation of stocked razorback report).
- VII. Accomplishment of FY 2013 Tasks and Deliverables, Discussion of Initial Findings and Shortcomings:

Task 1 – Collect light trap samples:

Light trap samples were collected at sites between river miles 199.6 (Saleratus Canyon) and 21.6 (Soda Springs Canyon) during four sampling events from 5/6-6/11/2013. A total of 83 light trap samples were collected and of those, 74 samples were sent to the CSU larval fish lab for identification. During the study, main channel temperatures ranged from 16.0°C to 24.0°C with a mean of 20.2±2.3°C. Habitat temperatures ranged from 15.0°C to 23.0°C with a mean of 18.4±2.3°C.

The 2012 sample results have yet to be received from the CSU larval fish lab. A total of 38 light trap samples were collected in 2012 and 24 were sent to CSU larval fish lab for identification.

Task 2 – Sample for YOY and age 1+ Razorback sucker:

Seine samples were collected between river miles 119.5 and 3.2 during two sampling trips (7/23-7/25/2013, 8/9-8/11/2013). An additional exploratory sampling event occurred beginning just downstream of the Tusher Diversion continuing to Green River State Park (RM 120). A total of 4976 m² was seined in 81 seine hauls, 19 of which were sent to the CSU larval fish lab for identification. During the study, main channel temperatures ranged from 20.0°C to 29.0°C with a mean of 24.3±2.3°C. Habitat temperatures ranged from 19.0°C to 35.0°C with a mean of 25.7±3.3°C.

The results from the 2012 samples have yet to be received from the CSU larval fish lab. A total of 19 seine samples were collected during 2013 and 13 were sent to the CSU larval fish lab for identification.

Task 3 – Preliminary sample identification and data entry:

All data has been entered. Collected samples have been submitted to the CSU larval fish laboratory for identification.

Task 4 – Annual reporting:

This annual report will be updated and resubmitted upon completion of the larval fish identification.

VIII. Additional noteworthy observations: As light trapping samples are pending identification by CSU Larval Fish Lab additional observations are limited to seine sampling. Other native fishes captured included flannelmouth sucker (n=2) with total lengths of 43mm and 125mm and Colorado pikeminnow (n=147) ranging in total length from 15-36mm. Other nonnative fishes captured include black crappie (n=4), black bullhead (n=14), white sucker (n=1), green sunfish (n=7) and gizzard shad (n=18).

IX. Recommendations:

- Pending sample identification results provided by CSU.

X. Project Status: On track and ongoing.

XI. FY 2013 Budget Status

A.	Funds Provided:	\$27,215.00
B.	Funds Expended:	\$27,215.00
C.	Difference:	\$ 0.00
D.	Percent FY 2013 work completed:	100%
E.	Recovery Program funds spent for publication charges:	\$ 0.00

XII. Status of Data Submission: All data will be submitted upon completion of larval identification by CSU.

XIII. Signed: Julie Howard November 13, 2013
Principal Investigator Date

XIV. Literature cited:

Bestgen, K.R., Zelasko, K.A., White, G.C. 2012. Monitoring reproduction, recruitment, and population status of razorback sucker in the upper Colorado River basin. Final report of Larval Fish Laboratory at Colorado State University to Upper Colorado River Endangered Fish Recovery Program. Denver, CO.