

Work Task C32: Determination of Salinity, Temperature, and Oxygen Limits for Bonytail and Razorback Sucker

FY07 Estimates	FY07 Actual	Cumulative Accomplishment Through FY07	FY08 Approved Estimate	FY09 Proposed Estimate	FY10 Proposed Estimate	FY11 Proposed Estimate
\$0	\$0	\$0	\$0	\$85,000	\$100,000	\$150,000

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Start Date: FY09

Expected Duration: FY12

Long-term Goal: To develop and maintain high quality backwater habitats for native fishes.

Conservation Measures: RASU2, RASU3, RASU5, RASU6.

Location: Native Fish Laboratory, Boulder City, NV.

Purpose: To determine thresholds for survival of RASU and BONY life stages for salinity, temperature, and oxygen.

Connections with Other Work Tasks (past and future): This work began under G3. This work is related to management of fish habitat restorations sites (e.g., E14).

Project Description: This study will evaluate through laboratory testing the threshold levels needed to sustain various life stages of RASU and BONY in backwater habitats developed by the LCR MSCP.

Previous Activities: Work began in FY07 under G3.

FY07 Accomplishments: Initial studies were conducted on RASU eggs and larvae survival versus salinity levels in holding waters. See G3 for summary of this work.

FY08 Activities: Under G3, studies will continue to refine threshold levels for RASU eggs and larvae; study designs will be developed to assess salinity thresholds for fingerling fish.

Proposed FY09 Activities: Proposed work for FY09 includes developing apparatus to test oxygen tolerances, to evaluate salinity tolerances of fingerling RASU, and to develop a study design to evaluate salinity thresholds for BONY eggs and larvae. Future work will build on these findings, evaluate temperature limits, and test composite stress levels for various combinations of salinity, temperature, and dissolved oxygen.

Pertinent Reports: A progress report for the 2007 research is in production.