Work Task C44: Management of Fish Food Resources in Off-Channel Native Fish Habitats

FY09 Estimates	FY09 Actual	Cumulative Accomplishment Through FY09	FY10 Approved Estimate	FY11 Proposed Estimate	FY12 Proposed Estimate	FY13 Proposed Estimate
\$0	\$0	\$0	\$0	\$60,000	\$100,000	\$100,000

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Start Date: FY11

Expected Duration: FY13

Long-term Goal: To maintain effectiveness of restored fish habitats.

Conservation Measures: BONY5, RASU6

Location: Various off-channel fish grow-out ponds and native fish refugia.

Purpose: To determine best management practices for maintaining ample food resources for native fishes in off-channel ponds within the Colorado River floodplain.

Connections with Other Work Tasks (past and future): This work is related to B7, B11, C25, C34, F5, and G3.

Project Description: This three-year study will evaluate means to enhance food resources in the various floodplain ponds being used within the LCR to hold or rear RASU and BONY. Off-channel habitats, including both manmade and natural floodplain ponds, are being used to support communities of RASU and BONY. In some ponds the fish are fed prepared feeds, in some cases the ponds are only fertilized with the assumption that this act boosts development of zooplankton for food, and in some cases neither feed nor fertilizer are added to the ponds and the fish must subsist on whatever food is naturally available. To maximize management of these habitats, the amounts of zooplankton in these ponds must be determined. This study evaluates ways to manipulate zooplankton communities to benefit native fishes, and develops recommendations for adding feed or fertilization to maintain food levels needed by native fish to attain targeted growth rates.

Previous Activities: This effort builds upon research conducted under C34.

FY09 Accomplishments: This is a new start in FY11.

FY10 Activities: This is a new start in FY11.

Proposed FY11 Activities: The first year of the study will investigate effects of pond fertilization on composition, density, and duration of zooplankton communities in lakeside ponds on Lake Mohave. Preliminary investigations identifying the role of larger macroinvertebrates in RASU and BONY diets will also begin. The study designs for out years will be finalized during FY11. All tests will focus on ways to manage food resources in off-channel habitats to improve quantity and quality of fish reared for the program.

Pertinent Reports: N/A