

Work Task C34: Characterization of Zooplankton Communities in Off-channel Native Fish Habitats

| FY07 Estimates | FY07 Actual | Cumulative Accomplishment Through FY07 | FY08 Approved Estimate | FY09 Proposed Estimate | FY10 Proposed Estimate | FY11 Proposed Estimate |
|----------------|-------------|--|------------------------|------------------------|------------------------|------------------------|
| \$0 | \$0 | \$0 | \$0 | \$60,000 | \$60,000 | \$0 |

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Start Date: FY09

Expected Duration: FY10

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 the relative abundance of zooplankton in off-channel ponds being used to support native fish communities within the Colorado River floodplain.

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

Project Description: This study will characterize the existing zooplankton communities of the various flood-plain ponds being used within the LCR to hold and/or rear RASU and/or BONY. Off-channel habitats, including both man-made and natural flood-plain 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 will collect and analyze zooplankton samples from such ponds quarterly over a 2-year period to characterize these zooplankton communities. Future investigations may be developed to evaluate ways to manipulate zooplankton communities to benefit native fishes.

Previous Activities: None.

FY07 Accomplishments: None, new start FY09.

FY08 Activities: Preliminary samples will be collected from lakeside ponds under B7 to develop a reference collection of common cladocerans, copepods, and rotifers, and to refine budget estimates. Final study design will be developed using funds from G3.

Proposed FY09 Activities: Analyze quarterly zooplankton samples collected from approximately 25 sites.

These sites may include but are not limited to:

- Two ponds from Overton WMA (B11, Reach 1)
- Eight ponds from Lake Mohave lakeside ponds (B7, Reach 2)
- Two Needles Golf Course ponds, Beal Lake, and Office Cove (Reach 3)
- Six ponds at Achii Hanyo Fish Rearing Station and Parker Dam Pond (Reach 4)
- Six ponds at Imperial NWR (Reach 5)

Pertinent Reports: N/A.