# Work Task B7:  Lake Side Rearing Ponds

| FY05 Estimate | FY05 Actual | Cumulative Accomplishment Through FY05 | FY06 Approved Estimate | FY07 Proposed Estimate | FY08 Proposed Estimate | FY09 Proposed Estimate |
|---|---|---|---|---|---|---|
| $250,000 | $230,000 | $230,000 | $200,000 | $150,000 | $150,000 | $150,000 |

**Contact:**            Tom Burke, (702) 293-8711

**Start Date:**            FY05            **Expected Duration:**  FY16 decision point

**Long-Term Goal:**            Maintain fish rearing capability; provide razorback sucker and bonytail for the LCR MSCP Fish Augmentation Program; accomplish species research.

**Conservation Measures:**  RASU3, RASU4, RASU5, RASU6, BONY3, BONY4, and BONY5

**Location:**  Reach 2, Lake Mohave, AZ/NV

**Purpose:**  Operate and maintain fish grow-out areas along the Lake Mohave shoreline to contribute to RASU broodstock development.

**Connections with Other Work Tasks (past and future):**  Activities described herein are related to Work Tasks B2 and B4, as fish for grow-out ponds will come from Willow Beach NFH and Dexter NFH.  In addition, some of the fish rearing research activities outlined in Work Tasks C10 and C11 may be conducted at these ponds.

**Project Description:**  Lake Mohave is operated by Reclamation as a re-regulation reservoir.  It operates annually within a 15' vertical elevation range, filling to elevation 645.5' msl by mid-May and lowering to an elevation of 630.5' msl in October.  Desert washes, which flow into the reservoir, deposit sediment and create wash fans.  Wave actions have redistributed and shaped these sediment deposits into sandbars, and in some areas, these sandbars isolate the lower portions of the washes from the lake proper.  There are at least ten such sandbars which have ponds behind them when the lake is full.  Reclamation and its partners in the Lake Mohave Native Fish Work Group have been using these lakeside ponds since 1993 as rearing and grow-out areas for RASU and BONY (see Figure B7).  The ponds are stocked with juvenile fish as the reservoir fills in the spring (typically stocked in March).  Reclamation staff monitor the fish throughout the growing season.  This includes periodic fertilization with alfalfa pellets and ammonium nitrates to sustain algae blooms and plankton production; removal of weeds and debris; installing and maintaining floating windmills or solar well pumps to mix the water and provide sufficient oxygen levels; and routine monitoring of physical, chemical, and biological parameters.  The ponds are normally harvested in the fall as the lake elevation declines.  The fish from these ponds are then released into Lake Mohave.

**Previous Activities:** These ponds have been in use since 1993 and more than 26,000 RASU have been reared and repatriated to Lake Mohave. The ponds have also been used to grow-out BONY; one of these ponds, North Nine Mile, is the only site where BONY juveniles were successfully reared from 50-250 mm during a single growing season.

**FY05 Accomplishments:** There were 1,691 RASU reared in nine lake side ponds and repatriated to Lake Mohave. These ponds were Yuma Cove, Nevada Larvae, Arizona Juvenile, Willow Cove, Nevada Egg, North Nine-mile, North Chemehuevi, Dandy Cove, and South Sidewinder. The average size of these fish was 375 mm and some fish were as large as 450 mm.

**FY06 Activities:** Approximately 2,000 juvenile RASU were stocked in March 2006 into eight of the same ponds used in 2005. Yuma Cove was not stocked, as it had not been completely harvested and some of the RASU from 2005 over-wintered in Yuma Cove. These fish spawned and produced numerous larvae, of which 4,500 were captured and transferred to Willow Beach NFH (see Work Task B1). Growth and survival of larvae and fingerlings that remain in the pond will be monitored throughout the summer. Routine monitoring and fertilization activities will be accomplished in 2006.

**Proposed FY07 Activities:** Ponds will be stocked with 2,000 to 4,000 juvenile RASU which will be monitored throughout the growing season. In addition, some ponds may be stocked with BONY to evaluate growth and survival.
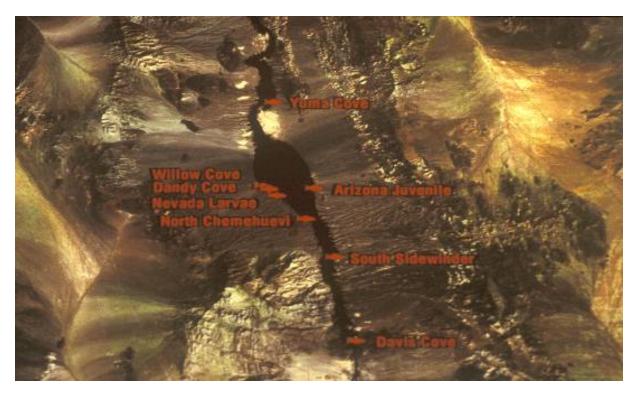


**Figure B7:** Lakeside Rearing Ponds used for razorback sucker and bonytail grow-out.