

## Work Task C15: Flannemouth Sucker Habitat Use, Preference and Recruitment Downstream of Davis Dam

FY05 Estimate	FY05 Actual	Cumulative Accomplishment Through FY05	FY06 Approved Estimate	FY07 Proposed Estimate	FY08 Proposed Estimate	FY09 Proposed Estimate
\$58,000	\$52,000	\$52,000	\$80,000	\$80,000	\$80,000	\$ 80,000

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

**Start Date:** FY05 **Expected Duration:** FY11

**Long-Term Goal:** Support flannemouth sucker conservation.

**Conservation Measures:** FLSU2 and FLSU3

**Location:** Reach 3, AZ/NV/CA

**Purpose:** Provide funding to support existing flannemouth sucker (FLSU) conservation and research below Davis Dam and to develop a management needs strategy for this species.

**Connections with Other Work Tasks (past and future):** This work task was previously included in the Draft FY05 Work Tasks as Flannemouth and Razorback Sucker Monitoring below Davis Dam (D9). The FLSU in FY06 is now being done under C15 and the razorback sucker portion of the work has been included under D8.

**Project Description:** Financially support FLSU research efforts in Reach 3 below Davis Dam to determine habitat use, habitat preferences, and recruitment and support decisions on habitat management activities for river channel and backwater habitats in Reach 3. This support will be provided for five years. Once completed, research results will be used through the adaptive management process to assess main channel and backwater management needs and to develop management strategies to benefit the FLSU.

**Previous Activities:** FLSU were reintroduced into the Colorado River below Davis Dam by Arizona Game and Fish Department in 1976 by transfer of fish captured at the confluence of the Colorado and Paria Rivers at Lee's Ferry, Arizona. This stock has persisted for three decades and now represents the only known population of this native species in the Colorado River downstream of Grand Canyon.

**FY05 Accomplishments:** Monitoring was conducted between January 24 and April 14. This work was combined with monitoring activities for RASU. The field work was led by Reclamation staff from Denver Technical Service Center with support from the Lower Colorado Regional Office. Thirty-three nights of trammel netting (368 net sets) yielded a total of 12,119 fish, including 124 FLSU. Unlike RASU, which tend to frequent off-channel and backwater habitats, the FLSU seem to spend much of their day out in swift flowing, main channel habitats.

New fyke-nets, having a low-profile, D-shaped opening, were designed and tested to see if they could be deployed in these swift water habitats to increase FLSU captures. The nets deployed and fished acceptably; however, the FLSU spawning season had passed by the time these tests were conducted. Results of this work are captured within a report covering a three year period from 2003 – 2005.

**FY06 Activities:** Reclamation staff continued monitoring using trammel-nets, hoop-nets, electro-fishing, and visual float counts. During seven field sampling trips between January and April, 365 FLSU were captured. Electro-fishing proved to be the best collection technique (260 fish), followed by trammel nets (104 fish), and hoop-nets (one fish). Modified hoop nets were not able to capture fish in the main, swift flowing river channel. In addition, these nets were often ripped apart by the high water volume. Research actions included sonic-tagging of 15 fish and videoing fish from a helicopter. These actions will continue into the fall. Data will be analyzed to assess population structure, range and distribution of fish and physical and chemical habitat components.

**Proposed FY07 Activities:** Continue monitoring and research actions from FY06; begin modeling population structure and distribution to determine habitat preferences and needs. Incorporate beach seining and backpack electro-shocking techniques to focus on numbers and distribution of juvenile life stages.

**Pertinent Report:** Annual report will be posted to the LCR MSCP website.