## Work Task E2: Beal Lake Native Fish

Partners:	U.S. Fish and Wildlife Service
Contact:	Gregg Garnett, LC-8455
Purpose:	Complete water/fishery management improvements, operate and maintain as an existing native fish refugium.
Conservation Measures:	BONY2 and RASU2
Long-term Goal(s):	Manage backwater created under the 1997 Biological Opinion for native fish throughout the life of the LCR MSCP.
Location:	Adjacent to Topock Marsh on Havasu National Wildlife Refuge
FY2006 Estimate:	\$210,000 includes costs for engineering, construction by Reclamation staff and/or contract services.
FY2007 Estimate:	\$50,000 for backwater management and monitoring.
FY2008 Estimate:	\$50,000. Same as previous year.
Project Description:	Beal Lake is located on Havasu National Wildlife Refuge in Needles, California, within the historic floodplain of the LCR. Beal Lake was approximately 225 acres of shallow, low quality aquatic habitat that was dredged to deepen it beginning in 2001. Additional improvements to make the backwater suitable for native fish are ongoing.

For FY2006, a dewatering facility will be constructed on the south end of Beal Lake. Reclamation's Yuma Area Office will design and engineer the facility. The current approach is to use land-based equipment to construct a peninsula from one of the existing roads out to the closest deep water (dredged channel) in Beal Lake. A permanent water line with totalizing flow-meter will be installed within the peninsula and under the existing road to convey pumped water from the south end of Beal Lake back into Topock Marsh.

An additional contract for the biological evaluation of the screen system effectiveness is also being considered. Larval stages of threadfin shad will be introduced into the vicinity of the screen system and samples from the downstream end of the screens will be examined to determine the percent exclusion of larval shad. A study plan is available.