

Work Task E38: Three Fingers Lake

FY16 Estimate	FY16 Actual Obligations	Cumulative Expenditures Through FY16	FY17 Approved Estimate	FY18 Proposed Estimate	FY19 Proposed Estimate	FY20 Proposed Estimate
\$0	\$0	\$0	\$200,000	\$200,000	\$4,000,000	\$4,000,000

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Start Date: FY17

Expected Duration: FY55

Long-Term Goal: Habitat creation

Conservation Measures: BLRA1, BONY2, CLRA1, CRCR2, LEBI1, and RASU2

Location: Reach 4, Cibola National Wildlife Refuge, California, River Mile 90

Purpose: To create and manage a mosaic of native land cover types for LCR MSCP covered species

Connections with Other Work Tasks (Past and Future): Vegetation monitoring is conducted under Work Tasks F1, wildlife monitoring is conducted under Work Tasks F2–F4 and F7, and fisheries monitoring is conducted under Work Task F5.

Project Description: Three Fingers Lake, located within the Cibola National Wildlife Refuge, is a 500-acre conservation area being restored to create a mosaic of backwater, marsh, honey mesquite (*Prosopis glandulosa*), and cottonwood-willow (*Populus fremontii-Salix gooddingii*) within the State of California. Development of the project is intended to satisfy both the LCR MSCP Habitat Conservation Plan requirements and a portion of California Endangered Species Act Incidental Take Permit No. 2081-2005-008-06.

Three Fingers Lake was dredged in the late 1990s and established 24 acres of open water with a small fringe of cattail (*Typha* sp.). The surrounding landscape is dominated with invasive saltcedar (*Tamarix ramosissima*). The backwater is bounded by the old river channel to the east and Milpitas Wash to the west. It is disconnected from the old river channel by an earthen structure and a sheet pile structure. Discussions with both the U.S. Fish and Wildlife Service and the

California Department of Fish and Wildlife have resulted in a restoration concept that would open 12 acres of the backwater to the river channel and maintain 12 acres of disconnected backwater.

Three Fingers Lake is being developed as a marsh and backwater complex. Honey mesquite and cottonwood-willow would be included on the fringes but not in substantial quantities. The portion of the backwater to be opened to the old river channel requires the removal of the sheet pile structure and would include creation of marsh.

The portion of the lake that will remain disconnected from the old river channel is the focus of the restoration efforts for native fishes. The restoration concept includes reshaping and contouring of the acreage surrounding the dredged channel in combination with the creation of new channels. The new channels would be shallower, but deep enough to remain open water, and would provide avenues of fish passage into the marsh complex. To circulate water and allow for management of water surface elevations for rail species, multiple infrastructure improvements are envisioned. First, new water control structures would be built to regulate surface water flows into and out of the lake. Second, a pump would transfer water from the disconnected backwater into the connected portion of the backwater on the western edge of the property. Removal of water from the lake is the primary water circulation method. Groundwater and recharge through the water control structures would maintain the water elevation.

Previous Activities: Identification of the property and evaluation for inclusion into the LCR MSCP were conducted under Work Task E16.

FY16 Accomplishments: This is a new start in FY17.

FY17 Activities: A preliminary design has been agreed on by the U.S. Fish and Wildlife Service and by the California Department of Fish and Wildlife. The design will include connected backwaters, disconnected backwaters, and new marsh. The Restoration Development and Monitoring Plan has been drafted and was sent to the California Department of Fish and Wildlife and the U.S. Fish and Wildlife Service. Acreages of specific land cover types will be updated upon completion of the Restoration Development and Monitoring Plan. A minimum of 50 acres of backwater and 100 acres of marsh are anticipated. Site-specific compliance activities to allow for development of Three Fingers Lake are being initiated.

Monitoring: Pre-development monitoring will be conducted in FY17 and funded under post-development work tasks (Section F). This will include general bird surveys from mid-April through June. The Cibola National Wildlife Refuge will conduct marsh bird surveys, and the Bureau of Reclamation will work in cooperation with the refuge to ensure these surveys continue up to and after construction.

Proposed FY18 Activities:

Maintenance/restoration/management: Restoration design, quantity and cost estimates, compliance, and permitting are anticipated to be completed. The development schedule will be integrated with construction activities of other conservation areas but are projected to being in late FY18 or FY19.

Monitoring: Pre-development monitoring will be conducted in FY18 if additional data are needed for compliance documentation.

Pertinent Reports: N/A