

Work Task E15: Backwater Site Selection

FY13 Estimate	FY13 Actual Obligations	Cumulative Expenditures Through FY13	FY14 Approved Estimate	FY15 Proposed Estimate	FY16 Proposed Estimate	FY17 Proposed Estimate
\$550,000	\$346,829.92	\$1,657,520.97	\$0	\$0	\$0	\$0

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Start Date: FY06

Expected Duration: Closed in FY13

Long-term Goal: Habitat creation.

Conservation Measures: BONY2, RASU2, and FLSU1.

Location: Reaches 3-6, California, and Nevada; River miles 22-276, Arizona, California, and Nevada.

Purpose: The backwater site selection process is used to evaluate and prioritize potential sites for backwater habitat creation for razorback sucker, bonytail, and flannelmouth sucker.

Connections with Other Work Tasks (past and future): E16 was used with this work task to identify projects other than existing backwaters for habitat creation. Starting in FY14, E15 and E16 have been combined into one Work Task E16.

Project Description: Backwater site selection consists of a five-step process to evaluate existing backwaters along the Colorado River within the LCR MSCP planning area, from reaches 3 to 6. This ultimately results in the conceptual-level planning efforts for a select number of sites, which would become available for the Program Manager to select for inclusion into the program. New backwaters, which may be constructed separate from the existing river channel (and its associated backwaters), are excluded from this effort, and would follow the general site-selection process (E16). Backwaters may be disconnected or connected with the main channel of the Lower Colorado River. Backwaters that are disconnected from the LCR channel are of considerably higher value to bonytail and razorback sucker than connected backwaters in the LCR, and are the preferred type of backwater to achieve LCR MSCP conservation goals for these species.

Previous Activities: The inventory of existing backwaters within Reaches 3-6 has been completed. Three backwaters are currently being managed under the LCR MSCP: 1) Beal Lake, 2) Big Bend Conservation Area, and 3) Imperial Ponds. Beal Lake was created under the 1997 Biological Opinion and does not count towards the 360 acres required under the LCR MSCP. Big Bend represents 15 acres of connected backwater within Reach 3 and Imperial Ponds represents 80 of disconnected backwater within Reach 5.

Discussions were held with representatives from the USFWS, CDFW, AGFD, NDOW, and Reclamation to clarify the goals of the backwater creation conservation measures and allow the program to continue to select and implement additional backwaters. As discussed with our Steering Committee, the focus of the new backwaters is on development in California.

The key discussion items and decisions addressed both the type of backwater to be created (disconnected and connected) and the location of these backwaters (Reach and State). First, although disconnected backwaters are the preference for the program a mix of connected and disconnected is expected to provide benefit to native fishes and therefore is acceptable. Second, backwaters within Reach 3 should be open to river to allow flannelmouth suckers access to the slackwater. Based on these clarifications, a five-year backwater strategy is no longer necessary.

Since the program is no longer inventorying the river to identify backwaters for restoration as originally envisioned the Work Task will be closed and backwaters will be identified using Work Task E16. This will also allow backwaters to be developed as a mosaic of multiple land cover types, which is the intent of the program and was also confirmed by the USFWS.

FY13 Accomplishments:

Reach 3. *Mohave Valley Conservation Area.* A 146-acre parcel along the Colorado River within California between river mile 237 and 236 was investigated as the location for a potential connected backwater project. The property is owned by the California State Lands Commission and leased to San Bernardino County, who manages the parcel as part of the Park Moabi Regional Park. Discussions about the project began among the land owner, lessee, and the LCR MSCP.

A design concept and a report for the backwater project were developed. The report reviewed the location, offered expertise on the proposed channel's point of approach, evaluated potential sediment dynamics, and suggested ways of introducing habitat complexity without increasing maintenance.

The design concept includes 56 acres of connected backwater within the footprint of the conservation area, which is projected at 90 acres. Native land cover types will line the banks and upland slopes of the backwater accounting for the additional 34 acres.

Reach 4. *Parker Dam Camp* was evaluated as a potential Conservation Area with an emphasis on creating backwater acreage. Originally developed as employee housing for the dam workers, the construction of Parker Dam Government Camp began in 1934 with the construction of Parker Dam. Once established, the property consisted of numerous residences and other buildings. Many decades after the completion of the Dam, in the 1990s, the Bureau of Reclamation determined that the facility was no longer required for project activities, and began the process of disposing of the houses and other buildings off site.

Asphalt roads, concrete sidewalks, and sparse landscaping are all that remain of the government town. Still owned and managed by Reclamation, the property was purposed as the site for a new conservation area that would consist of a series of native fish ponds with riparian and upland land cover types.

Investigatory borings and wells were drilled at the site. Results of the investigation revealed high saline groundwater and limited well production. Due to these results, Parker Dam Camp is not suitable for the development of native fish ponds. However, potential for the LCR MSCP to establish habitat on the site still exists. The adjacent stream, return flow from Gene Reservoir, is another water source that could allow for the establishment of riparian habitat. The Camp will be re-evaluated at a later time as a riparian dominated Conservation Area under Work Task E16.

PVER-South. In order to determine the quantity and quality of groundwater beneath PVER-South, which would provide water to any disconnected backwaters, drilling of two investigatory groundwater wells were completed in FY13. The 6-inch diameter 290-foot deep wells indicate water quality is comparable to the Colorado River. Future 16-inch production wells should be able to produce over 1,000 gallons per minute each. The next step in the evaluation of PVER-South is to refine the draft concept using the information gathered and generate a cost estimate for the Conservation Area. These tasks will be performed under Work Task E16.

FY14 Activities: This Work Task is closed and activities will be tracked under E16: Conservation Area Site Selection.

Proposed FY15 Activities: This Work Task is closed and activities will be tracked under E16: Conservation Area Site Selection.

Pertinent Reports: N/A