

## Work Task E27: Laguna Division Conservation Area

FY11 Estimate	FY11 Actual Obligations	Cumulative Expenditures Through FY11	FY12 Approved Estimate	FY13 Proposed Estimate	FY14 Proposed Estimate	FY15 Proposed Estimate
\$1,375,000	\$3,060,556.46	\$1,106,462.55	\$6,290,000	\$5,000,000	\$3,000,000	\$2,000,000

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**Start Date:** FY10

**Expected Duration:** FY55

**Long-term Goal:** Habitat creation.

**Conservation Measures:** CLRA1, WIFL1, YHCR2, LEBI1, BLRA1, YBCU1, ELOW1, GIFL1, GIWO1, VEFL1, BEVI1, YWAR1, SUTA1, PTBB2

**Location:** Reach 6, Federal Lands, River Mile 43-49, California and Arizona.

**Purpose:** Create and manage a mosaic of native land cover types for LCR MSCP covered species.

**Connections with Other Work Tasks (past and future):** This was a new start for the LCR MSCP in FY10.

**Project Description:** The Laguna Division, river miles 43-49, has been identified as having potential for large-scale riparian and marsh restoration and enhancement (approximately 1,200 acres). In 2007, the Laguna Division Planning Group was formed to identify potential restoration projects within the division. The intent was to identify potential restoration projects and combine resources to ensure any actions taken in the area would not affect other potential restoration projects or ongoing river operations.

The Laguna Division Planning Group consists of representatives from the following organizations:

- Arizona Game and Fish Department
- Arizona Department of Water Resources
- California Department of Fish and Game
- Pacific Institute
- U.S. Fish and Wildlife Service
- Bureau of Land Management
- Bureau of Reclamation

The Laguna Division Conservation Area (LDCA) is a relatively wide, undeveloped area with a series of low linear depressions, which are remnants of former river meanders. The intent of this project is to create marsh and riparian land cover types by shaping and contouring multiple meandering channels. These land cover types would be maintained with a maximum base flow of 100 cubic feet per second (cfs) from the Gila Gravity Canal sluicing gates. Open water areas could be created in the form of linear excavations aligned with historic river meanders east of lands identified as future stockpiling areas for dredged silt removed from the river (Laguna settling basin). To minimize earthwork, cuts and fills would follow the existing topography where feasible. Adjacent terraces would be graded to allow flooding and promote the establishment of native riparian species. Water control structures would be created to manage water levels. Upland vegetation would receive water through flooding.

To support the concept described above, inlet modifications to the point of diversion at the Gila Settling basin will be made to allow for up to 100 cfs capacity. The diversion pipe system will be engineered to allow for maximum management flexibility including diverting the entire flow to Mittry Lake Wildlife Area, LDCA, or the historic river channel. The Water Accounting Agreement will be used to support LDCA.

**Previous Activities:** In coordination with the Laguna Planning team, several conceptual designs were created with the intent of determining the technical feasibility of implementing a large scale restoration project. In addition, a team was established to determine the availability of water to create and support the new habitat. The combination of technical feasibility, water availability, as well as cost effectiveness was used to determine the project's implementation.

LDCA was a new initiative for the LCR MSCP in FY10. Three alternative designs for the Laguna Division were prepared with input from the Laguna Division Planning Group using non-LCR MSCP funds. A final design was presented and approved as a new start project by the LCR MSCP Steering Committee in October 2009 with the passing of resolution 10-002.

A monitoring schedule was developed based on vegetation type, presence/absence of standing water or moist soils, and the presence/absence of LCR MSCP species in adjacent areas. The land adjacent to LDCA has been surveyed for many years by AGFD for marshbirds including Yuma clapper rail, California black rail and least bittern, which are LCR MSCP covered species. All three of these species are present within the wetland/marsh area during the breeding season. Surveying of marshbirds continued until work began at the site. The EA for the site includes provisions for protecting these species and the adjacent Mittry Lake Wildlife area provides an alternative habitat for the species displaced by the construction at LDCA.

#### **FY11 Accomplishments:**

**Construction, Maintenance/Restoration/Management.** Continued analysis/design refinements occurred between the Laguna Planning team, local stakeholders, state and federal agencies, and Reclamation.

In February 2011, a Finding of No Significant Impact (FONSI) was signed by Reclamation, after review of the final EA prepared for LDCA.

At the direction of the U.S. Army Corps of Engineers, soils were sampled within LDCA. The results from the samples can be found in *The Laguna Division Conservation Area Wetland Restoration Project Site and Soil Salinity Analysis Report* dated April, 2011. The soil samples confirmed expected conditions and therefore no changes to the draft planting and restoration activities are being made. Soil sample results were incorporated into the submittal of the Section 404 permit application of the Clean Water Act and Section 10 of the Rivers and Harbors Act of 1899. Approval of the application was received in September 2011.

Procurement and delivery of approximately 2,300 feet of 48-inch HDPE pipe was completed in early 2011. Fusion and installation of the pipeline began in summer of 2011 and was completed in winter 2011. Clearing of Reach 1 began and is expected to be completed by spring 2012.

**Monitoring.** Monitoring commenced to create a baseline of wildlife presence and general vegetation information prior to construction and as a prerequisite for compliance requirements. Vegetation data were collected in the fall and are still being analyzed as of this report. Six Anabats were set out during three different periods across the site for acoustic monitoring of bats. Dates of deployment were: January 24-31, May 18-31, and August 19-September 8 for a total of 43 nights. Results are still being analyzed as of this report. Four surveys were conducted for yellow-billed cuckoos between June 25 and July 27, 2011. One cuckoo was detected, but no nesting was confirmed and this bird was reported as a migrant. Three LCR MSCP species were confirmed as breeders: black rail, Yuma clapper rail and Bell's vireo. No willow flycatcher habitat was present at the site.

#### **FY12 Activities:**

**Construction, Maintenance/Restoration/Management.** As construction progresses, further analysis/design refinement will occur between the Laguna Planning team, local stakeholders, state and federal agencies, and Reclamation.

Pipeline installation will be completed in FY12. Clearing activities will continue in Reach 1 and Reach 2 and procurement of infrastructure will take place in FY12 with anticipated construction in FY13.

Site maintenance, irrigation, and hand planting will occur. Site maintenance will include weed maintenance, which is expected to be on-going throughout clearing, construction and for the first 3-5 years of plant establishment.

**Monitoring.** There will be no monitoring of species during construction. Once vegetation has been established monitoring will commence.

**Proposed FY13 Activities:** Continued analysis/design refinement will occur between the Laguna Planning team, local stakeholders, state and federal agencies, and Reclamation.

Construction of infrastructure is expected to commence in FY13. Infrastructure for LDCA includes water control structures, headworks and outlet works, and pinch valve assembly. Clearing will continue into Reach 3 after completion of Reach 2. Weed maintenance will

continue. There will be no monitoring of species during construction. Once vegetation has been established monitoring will commence.

**Pertinent Reports:** *Laguna Division Conservation Area Update*, and *Laguna Division Conservation Area Task 4: Final/Preferred Habitat Restoration Concept*, are available upon request.