

Work Task E27: Laguna Division Conservation Area

FY10 Estimates	FY10 Actual	Cumulative Accomplishment Through FY10	FY11 Approved Estimate	FY12 Proposed Estimate	FY13 Proposed Estimate	FY14 Proposed Estimate
\$750,000	\$688,738.54	\$688,738.54	\$1,375,000	\$6,290,000	\$10,400,000	\$4,900,000

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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 is 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 Gail Gravity Main Canal forebay. 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 by either by flooding or drip irrigation.

To support the concept described above, inlet modifications to the point of diversion at the Gila desilting basin would be made to allow for up to 100 cfs capacity, would be required. This diversion ditch/pipe systems would be engineered to allow for maximum management flexibility including diverting the entire flow to Mittry Lake, the Laguna Division Conservation Area, or the old river channel. The Laguna Division Conservation Area will be using the Water Accounting Agreement.

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 will ultimately determine the project's implementation.

The project is 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.

FY10 Accomplishments: In January, members of the MSCP presented the LDCA concept to the Regulatory Division of the Corps of Engineers in advance of the actual permit application which is scheduled for FY11. Under the Clean Water Act, a U.S. Army Corps of Engineers Section 404 permit which regulates discharge of dredged, excavated, or fill material in wetlands, streams, rivers, and other U.S. waters, is required.

Further analysis/design refinement occurred between the Laguna Planning team, local stakeholders, state and federal agencies, and Reclamation. Updates and a marsh workshop were held as well as a briefing to the Steering Committee.

Compliance activities were initiated for the overall restoration plan in support of the creation of riparian and marsh land cover types. A wetlands delineation and cultural survey was completed. A draft Environmental Assessment (EA) was prepared in accordance with the National Environmental Policy Act (NEPA). Part of the NEPA

process requires notification of the public. Two open house meetings were hosted on March 18; one at Hidden Shores and the other in the City of Yuma. LDCA informational brochures were created and distributed. A website was created to allow the Planning Team, stakeholders, and the public access to LDCA information. The site is: <http://www.lcrmscp.gov/worktasks/conservationareas/E27/index.html>

To facilitate removal of non-native vegetation, Reclamation has been discussing with the Bureau of Land Management development of a burn plan. The burn plan would be used to plan and orchestrate a 2,000 acre prescribed fire to clear existing non-native tamarisk from the site. Alternative methods such as clearing with mechanized equipment and/or a combination of mechanical clearing and on-site treatments (incineration, chipping, mulching) are being evaluated. Clearing of the project area is scheduled for early FY12.

Meetings and discussions concerning land-use agreements, establishing rights-of-way, river operational requirements, and operations/maintenance requirements have been occurring and will continue.

Delivery of 30,000 tons of Aggregate Base Course (ABC) rock began and is being stockpiled in the project area for road surfacing and firebreak construction.

Existing habitat at the proposed LDCA consists mainly of patchy saltcedar, *Atriplex*, and other shrub species. Except for a strip along the east side of the site, most of the site is dry. The area on the eastern edge consists of a narrow wetland vegetated namely by cattail, *Phragmites* and/or *Arundo*. There are also a few large Goodding's willow and mesquite trees present along this edge.

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 the 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. Marshbirds will continue to be surveyed until the work begins at the site. The EA for the site has included provisions for protecting these species and the adjacent Mittry Lake area provides an alternative habitat for the species displaced by the construction at LDCA.

Proposed FY11 Activities: Continued analysis/design refinement will occur between the Laguna Planning team, local stakeholders, state and federal agencies, and Reclamation. Plans for clearing non-native vegetation, primarily salt cedar, are being finalized. At the direction of the US Army Corps of Engineers, several cross sections were cut using a bulldozer to allow access for soil sampling. The results of the sampling can be found in the *Laguna Division Conservation Area Wetland Restoration Project Site and Soil Salinity Analysis Report* dated April 1, 2011. The soil sampling confirmed expected conditions and therefore no changes to the draft planting and restoration activities are being made.

Resources necessary to begin construction of the water delivery system, such as procurement of pipe and water control structures, will be initiated. Services for planting as well as site maintenance will be arranged. This site maintenance will include post clearing and post planting removal of volunteer tamarisk.

Proposed FY12 Activities: Development of the 1,200-acre Conservation Area has been separated into 3 distinct phases. Clearing of saltcedar is expected to begin with the northern-most cell (Phase 1) in FY12 and progress to the south. Other activities scheduled for FY12 include installation of the water delivery pipeline and inlet structure. Clearing of Phase 2 is scheduled for FY13 and clearing of Phase 3 is scheduled for FY14. In general, clearing and grubbing operations will be initiated first. Once completed, earthwork to contour the site creating primary and secondary channels will begin. The construction of water control structures will also be completed. Planting and site maintenance is the final step in the restoration process. Clearing is expected to be completed in FY14 with final planting and initiation of site maintenance occurring in FY15-16. Monitoring activities will end once clearing and construction has begun and will commence when the site is finished in 2014.

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