

Work Task E24: Cibola NWR Unit #1

FY06 Estimates	FY06 Actual	Cumulative Accomplishment Through FY06	FY07 Approved Estimate	FY08 Proposed Estimate	FY09 Proposed Estimate	FY10 Proposed Estimate
\$0	\$0	\$0	\$120,000	\$1,213,000	\$1,072,000	\$1,236,000

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Start Date: FY07

Expected Duration: FY55

Long-term Goal: Habitat Creation

Conservation Measures: WIFL1, WRBA2, WYBA3, CRCR2, YHCR2, YBCU1, ELOW1, GIFL1, GIWO1, VEFL1, BEVI1, YWAR1, and SUTA1

Location: Reach 4, Cibola National Wildlife Refuge, one-half mile east of River Mile 97, AZ

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 work task incorporates Cottonwood Genetics Study (E6), Mass Transplanting Demonstration (E7), and Seed Feasibility Study (E8) with additional adjacent acreage on Unit 1 of Cibola NWR. After completion of the research projects in FY09, operation and maintenance of these work tasks will be tracked under E24.

Project Description: Reclamation currently has a number of established projects at Unit 1, which include restoration research and demonstrations projects that began as a pre-cursor to the LCR MSCP. In 1999, USFWS and Reclamation planted the Cibola Nature Trail and established 34 acres of cottonwood-willow and mesquite land cover type within Unit 1. In 2002, USFWS and Reclamation planted another approximately 18 acres of cottonwood/willow in Unit 1 north of the Nature Trail. Four additional approximately 20-acre fields in Unit 1 are occupied by three projects that have been fully or partially funded by the LCR MSCP. These include E6 (Cottonwood Genetics Study), E7 (Mass Transplanting Demonstration), and E8 (Seed Feasibility Study). To the east of these projects are an additional two agricultural fields. The six fields combined are currently included in a 5-year land use agreement with USFWS to continue research activities on Unit 1 (expires in FY09).

Work task E24 incorporates the aforementioned existing projects and agricultural land as well as substantial additional adjacent acreage into a single conservation area. Research projects that are currently ongoing will retain their individual work task designation until the termination of research or in FY09. The land included in Unit 1 (E24) encompasses approximately 900 acres

and ranges in cover and use from agricultural fields, to partially improved land, to undeveloped land. The acreage in Unit 1 is targeted primarily for cottonwood/willow cover type development for SWFL, but will also likely include a mosaic of native habitats including riparian, wetland, and riparian-upland interface areas.

The acreage in Unit 1 (E24) has been categorized into five areas. Area #1 (180 acres) includes active agricultural fields, existing (converted agriculture) cottonwood/willow cover-type, and ongoing LCR MSCP research and demonstration projects. Area #2 (Hippy Fire) includes 313 acres that have been cleared as a result of the Hippy Fire. Cibola NWR has performed substantial capital improvements to this area over the past few years including clearing, laser-leveling, field construction, and irrigation and drainage infrastructure installation. The area is currently planted in a cover crop and is being conditioned to improve soil salinity. Areas #3 (Baseline 90) and #4 (North 160) are 100 and 146 acres of undeveloped land and fallowed agricultural land, respectively. The areas will require clearing, leveling, installation of irrigation infrastructure, and soil conditioning before development for native riparian species. Area #5 (Crane Roost, 147 acres) has been cleared and leveled and is currently irrigable. A portion of this area has been planted with cottonwood, willow, and mesquite species. The area will require upgrades to the irrigation system and needs further soil conditioning to continue development.

Previous Activities: N/A

FY06 Accomplishments: This is a new start in FY07.

FY07 Activities: In November 2006, in coordination with the Refuge Manager, five areas of cottonwood-willow land cover development were selected within Unit 1 using the site-selection review process. The potential for development of a large block of cottonwood-willow land cover type, available land and water, existing investments already made by the LCR MSCP, the large amount of land and infrastructure improvements already made, protection from unrestricted public use, and willingness of the refuge manager to work in partnership with the LCR MSCP made this project an ideal candidate for incorporation into the LCR MSCP.

A land use agreement securing land and water resources for the life of the program is currently being developed and a Conservation Area Development Plan is being drafted. This long-term agreement will supersede the original short-term research agreements. Compliance with NEPA is covered under the Lower Colorado River National Wildlife Refuges Comprehensive Management Plan and Associated Environmental Assessment. Any additional compliance documentation will be secured in FY07.

Several areas on Unit 1 require immediate stabilization measures to ensure proper water delivery and drainage. In addition, ongoing measures to prevent encroachment of invasive nonnative species (primarily saltcedar), such as herbicide application and establishment and maintenance of a cover crop will be continued in FY07. Specific activities in FY07 include: 1) the addition of irrigation supply turnouts to the Crane Roost (Area #5) and establishment of a soil-conditioning cover crop, 2) uninterrupted continuation of invasive weed control over the entire site, 3) continuing existing cover-crop maintenance and soil conditioning in Area #2 (Hippy Fire), 4) drafting the land use agreement, development plan, and compliance documentation, and 5) initial survey of the irrigation and drainage infrastructure to determine necessary system upgrades for

future development and expansion. The development plan will allow us to refine acreage cost estimates for site development.

Proposed FY08 Activities: The majority of work planned for FY08 involves infrastructure upgrades and repair. Approximately 5,000 feet of roads will be repaired to allow equipment access to the site (planting, hauling, and construction). A number of the existing drains will be cleaned, others will require further excavation for proper function, and additional drains will be constructed to improve drainage (particularly on acreage surrounding the Hippy Fire). In addition, trees will be ordered (FY08 dollars obligated) for mass transplanting of Crane Roost (150 acres). Regular irrigation cycles, cover crop and soil management practices, invasive weed control, and general maintenance activities will continue in FY08.

Pertinent Reports: *Cibola NWR Unit 1 Trip Report, November 2006* is available from the LCR MSCP.