

Work Task E3: 'Ahakhav Tribal Preserve

FY09 Estimates	FY09 Actual	Cumulative Accomplishment Through FY09	FY10 Approved Estimate	FY11 Proposed Estimate	FY12 Proposed Estimate	FY13 Proposed Estimate
\$145,000	\$97,370.14	\$1,392,665.44	\$241,000	\$0	\$0	\$0

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Start Date: FY04

Expected Duration: Closed in FY10

Long-term Goal: Restoration research and habitat creation

Conservation Measures: WIFL1, WRBA2, WYBA3, YBCU1, ELOW1, GIFL1, GIWO1, VEFL1, BEVI1, YWAR1, SUTA1, MNSW2, CLMB2, PTBB2

Location: Reach 4, Colorado River Indian Tribes, river miles 173-174, 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): Vegetation and species monitoring are being addressed in F1-F4.

Project Description: In September 2004, the LCR MSCP began working at the 'Ahakhav Tribal Preserve through a research and development agreement. A variety of methods and techniques for the propagation and irrigation of cottonwood-willow and mesquite land cover types were used to create approximately 154 acres of habitat. Prior to habitat development, the site consisted of out-of-production agricultural fields dominated by tumbleweed and sparse saltcedar. All work was done in an effort to evaluate efficient and cost-effective methods for various revegetation projects. Maintenance and management of approximately 154 acres of riparian land cover types created at CRIT 9 since 2003 is ongoing.

Previous Activities: Work began in 2003 by restoring CRIT 9 (154 acres) with native riparian plant species including cottonwood, willow, and mesquite. This involved site preparation (clearing, root-ripping, leveling), soil testing, installation of irrigation infrastructure, and planting. Monitoring of irrigation and maintenance of planted areas has been ongoing throughout this process.

FY09 Accomplishments:

Maintenance/Restoration/Management. At CRIT 9, previously established cottonwood-willow and mesquite land cover types totaling 154 acres were flood irrigated with an average of 9.5 acre-feet/acre of water. General maintenance on CRIT 9 included clearing canals of debris, installing tail ditches, maintaining access roads, installation of canal bridges, installation of signage, repairing ditches and gates, and re-establishing berms between irrigated sections. Irrigation continued at CRIT 10 (58 acres), which was previously planted with a cover crop of alfalfa and Sudangrass.

Discussion of a possible land use agreement between the Colorado River Indian Tribes and the LCR MSCP Program Manager continued. LCR MSCP staff members attended two tribal council meetings during FY09.

Monitoring. Post-development vegetation monitoring was conducted at CRIT 9 in sections 1-4. Canopy closure ranged from 10% to 100% with an average of 74.13%. Average height and DBH for the overstory were 9 m and 17 cm, respectively. Average tree height and DBH for the intermediate and shrub layer category were 6 m and 10 cm, respectively. Land cover types included cottonwood-willow types II-III and honey mesquite III, with an overall site cover type of cottonwood-willow type II.

Anabat bat detectors were deployed quarterly across the site in different habitat types to determine bat activity. All four MSCP species were acoustically detected using the site in FY09, although the Townsend's big-eared bat was only detected once. Capture surveys were conducted once a month from May to September. Western red bats, western yellow bats, and California leaf-nosed bats were captured, and voucher calls were obtained.

Avian species were surveyed using an intensive area search method. There were 158 pairs of birds comprising 20 species that were confirmed as breeding at CRIT 9, including two LCR MSCP covered species, the vermilion flycatcher and the summer tanager.

For the second year, the mature cottonwood-willow and mesquite habitat in CRIT 9 was surveyed on three nights for elf owls. No elf owls responded to taped recordings.

The CRIT 9 site was visited 11 times between June 25 and August 20 to survey for yellow-billed cuckoos. Cuckoos were present from June 25 to July 30. Nesting was not confirmed, but based on behavior and timing of detections, nesting was possible.

FY10 Activities:

Maintenance/Restoration/Management. Maintenance of CRIT 9 continued in FY10 until the end of the research grant on December 31, 2009. Maintenance activities included irrigation infrastructure repair, application of fertilizers, maintenance of fields, installation of more tail ditches, use of a crop consultant to monitor plant health, and installation of additional signage on the site.

Since the site was developed, the fields are no longer level. Initially the site was laser leveled; however, due to the extremely sandy environment and high wind conditions the site has been taking longer to irrigate. The uneven surface causes the flood irrigation to take longer than necessary and is believed to flush vital nutrients from the soil. A thorough GPS survey was conducted to determine existing slope of the field. In-house surveyors will be utilized to guide improvements to the irrigation system.

Reclamation has discussed the potential inclusion of CRIT 9 into the LCR MSCP as a new Conservation Area with the Colorado River Indian Tribes Tribal Council. If the Tribal Council is interested in entering into an agreement with Reclamation to manage CRIT 9 as an LCR MSCP Conservation Area, Reclamation will evaluate their proposal. If the Program Manager recommends this project be included as a new Conservation Area, Reclamation will request concurrence from the Steering Committee. However, at this time, CRIT has not determined if they are agreeable to proposing CRIT 9 as a new LCR MSCP Conservation Area. With the expiration of the existing research grant on December 31, 2009, this work task will be closed in FY10.

Monitoring. Monitoring may continue as part of system-wide monitoring until the site is secured for the program.

Proposed FY11 Activities: The work task was closed in FY10. Post-development monitoring of abiotic and biotic habitat characteristics may continue in CRIT 9.

Pertinent Reports: *'Ahakhav Tribal Preserve: 2009 Annual Report* will be posted to the LCR MSCP Web site.