

Work Task E31: Hunters Hole

FY14 Estimate	FY14 Actual Obligations	Cumulative Expenditures Through FY14	FY15 Approved Estimate	FY16 Proposed Estimate	FY17 Proposed Estimate	FY18 Proposed Estimate
\$75,000	\$86,326.00	\$344,044.72	\$80,000	\$65,000	\$60,000	\$60,000

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Start Date: FY11

Expected Duration: FY55

Long-Term Goal: Habitat creation and maintenance

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

Location: Reach 7, Arizona, River Mile 2.5

Purpose: To create and maintain land cover types and support site improvements that benefit LCR MSCP covered species

Connections with Other Work Tasks (Past and Future): Vegetation and species monitoring are being addressed under Work Tasks F1–F7.

Project Description: In 2010, in cooperation with the YCNHA, a restoration plan for Hunters Hole, located within the State of Arizona and within Reach 7 of the LCR MSCP planning area was developed. The focus of the restoration has changed due to dropping groundwater levels. The open water was eliminated and replaced with wet, dense, cottonwood-willow and honey mesquite and is anticipated to achieve 36 acres of cottonwood-willow land cover type, reducing future pumping costs, using less water, and maximizing the credit for the LCR MSCP.

The YCNHA secured funding from the Arizona Water Protection Fund to design, permit, and clear and has completed establishment of native plants at Hunters Hole. At the October 27, 2010, LCR MSCP Steering Committee meeting, Resolution 11-001 was approved, and LCR MSCP staff are now responsible for the operation and maintenance of created land cover types at Hunters Hole.

Previous Activities: Earthwork and irrigation infrastructure was fully installed in February 2012. The site was planted using a variety of native species planting techniques during March and was planted similar to the original design that

incorporated marsh and riparian land cover types. Bulrush and willows were planted in the marsh cells, and willows, mesquite, cottonwoods, and native grasses were planted in the flood-managed fields.

FY14 Accomplishments:

Maintenance/Restoration/Management: A plan to remotely irrigate the site was developed and implemented in FY14. To complement the new groundwater pump, which can now be remotely operated, additional upgrades were made in FY14 to automate the irrigation system valves. These upgrades were intended to reduce labor costs and increase safety of onsite personnel; however, they resulted in the increased expenditures in FY14. A standard operating procedure for the irrigation system was refined to reduce water use and allow for remote operation. Due to the travel time associated with reaching the site, Hunters Hole will utilize this automated irrigation system, expected to be operational in FY15.

Maintenance activities can be separated into two categories: infrastructure maintenance and habitat maintenance. Infrastructure maintenance includes road grading, groundwater pump preventative maintenance, and related activities. Habitat maintenance includes weeding of invasive species, maintaining the irrigation outfall structures, coordinating activities with the United States Border Patrol, application of herbicide when required, and maintaining the site as a safe working environment.

The roads, in addition to being used for LCR MSCP purposes, are also used by the United States Border Patrol for patrolling the surrounding area.

Monitoring: Monitoring was changed in 2014, as southwestern willow flycatcher and yellow-billed cuckoo surveys were added in the third year of growth per protocol. Vegetation monitoring was not conducted in FY14 and will not be conducted in future years until management guidelines have been established for the conservation area.

Small mammal trapping was conducted on three occasions in 2014, and approximately 120 traps were placed each time. No covered species were captured, but some species typically found in riparian habitat were captured.

Two rapid surveys for birds were conducted at Hunters Hole. One survey was conducted in April, and a second survey was conducted May. No covered species were detected breeding, but migratory yellow warblers were detected.

Marsh bird surveys were conducted on three occasions where marsh habitat remains at the site. No marsh birds were detected. Surveys will be discontinued, as marsh habitat has begun to convert to riparian habitat.

Southwestern willow flycatcher surveys were conducted on five occasions. Migrant flycatchers were detected on the first survey in May, but no breeding or resident birds were detected.

Yellow-billed cuckoo surveys were conducted on four occasions, and no birds were detected.

A permanent acoustic bat monitoring station was set up at Hunters Hole in 2013. In 2014, western red bats, western yellow bats, and the Townsend's big-eared bats were detected at Hunters Hole.

FY15 Activities:

Maintenance/Restoration/Management: An automated irrigation system at Hunters Hole will be utilized in FY15. This upgrade was implemented in order to allow all six of the irrigation valves and the well pump to be controlled electronically and remotely from Reclamation's Yuma Area Office. It will also reduce the labor hours required to travel to the site for manual irrigation and increase personnel safety at this remote site near the International Border with Mexico. Invasive species control and irrigation will continue throughout 2015 as the site becomes established.

Road maintenance is ongoing and conducted as required. The roads, in addition to being used for LCR MSCP purposes, are also used by the United States Border Patrol for patrolling the surrounding area.

Monitoring. An established long-term bat monitoring station will be used to collect acoustic data. General bird surveys will be conducted from mid-April to mid-June. Single species surveys for the southwestern willow flycatcher and yellow-billed cuckoo will be conducted during their respective breeding seasons. MacNeill's sootywing surveys will be conducted in the spring and summer.

Proposed FY16 Activities: Hunters Hole will be maintained and operated to meet covered species habitat requirements and support adaptive management activities to improve site conditions. Maintenance, monitoring, and project coordination will be conducted. Invasive species control and irrigation will continue throughout 2016 as the site becomes established.

Road maintenance is ongoing and conducted as required. The roads, in addition to being used for LCR MSCP purposes, are also used by the United States Border Patrol for patrolling the surrounding area.

Monitoring. An established long-term bat monitoring station will be used to collect acoustic data. General bird surveys will be conducted from mid-April to

mid-June. Single species surveys for the southwestern willow flycatcher and yellow-billed cuckoo will be conducted during their respective breeding seasons. MacNeill's sootywing surveys will be conducted in the spring and summer.

Pertinent Reports: The *2013 Hunters Hole Conservation Area Annual Report*, which summarizes any planting conducted, site management, the results of monitoring, and any recommendations for future adaptive management, will be posted on the LCR MSCP Web site once integration of the data collected throughout the calendar year is complete.