Lower Colorado River Multi-Species Conservation Program

Balancing Resource Use and Conservation

Beal Lake Riparian Restoration Area

Beal Lake Riparian Restoration Area began as partnership between the Bureau of Reclamation and the U.S. Fish and Wildlife Service to create a haven for native fish on the Havasu National Wildlife Refuge near Needles, California.

In working toward this goal, the partners determined that the project also offered an invaluable opportunity for the Lower Colorado River Multi-Species Conservation Program to research efficient ways of using dredged materials and test a variety of methods for establishing native plant communities.

To create a functioning backwater, deep channels were excavated throughout Beal Lake. The excavated sediment was deposited on land adjacent to the lake



where the material was mixed with existing soils and divided into a series of fields that could be independently planted, irrigated, and managed.

The project area was broken into two phases (see map). The development of Phase 1 included installation of an irrigation system, soil testing, and demonstration of several planting methods. This acreage now hosts 59 acres of successfully established Fremont cottonwood, Goodding's willow, coyote willow, and screwbean and honey mesquite.

During Phase 2, Reclamation prepared additional fields for planting, tested irrigation systems, and demonstrated additional planting techniques, including various seeding methods and planting one-gallon container plants and poles. Phase 2 contributed an additional 48 acres of riparian habitat to the project.

Today, the 100+ acres of cottonwood and willow habitat on the banks of Beal Lake are demonstrating a variety of native riparian plant restoration and habitat management practices, with results monitored and documented annually. LCR MSCP covered species located at Beal Lake Riparian Restoration Area include: Colorado River cotton rat; acoustic detections of western red bat, western yellow bat, California leaf-nosed bat, Townsends big-eared bat; nesting yellow-billed cuckoo, Sonoran yellow warbler, Arizona Bell's vireo, summer tanager, migrating willow flycatchers; at MAPS banding site summer tanager, Sonoran yellow warbler, Arizona Bell's vireo and southwestern willow flycatcher (flycatcher was confirmed southwestern subspecies as it was banded); and in Beal Lake razorback sucker, bonytail, and Yuma clapper rail.

For more information and documentation about this activity, visit the LCR MSCP website at: <u>www.lcrmscp.gov</u>

