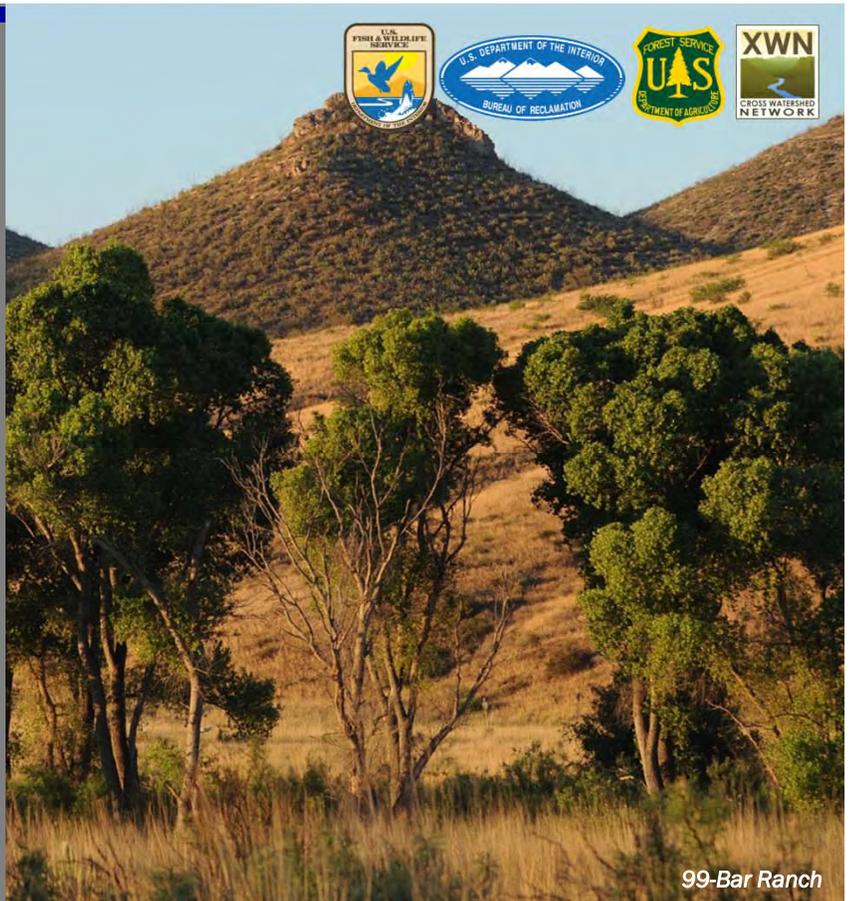


LAND CONSERVATION

Strategic Upland Conservation Easements to Support Leslie Canyon National Wildlife Refuge



The Leslie Canyon National Wildlife Refuge (LCNWR) is a 2,765-acre Refuge in the Rio Yaqui Basin, a binational watershed recognized for its high level of biodiversity. The Refuge was established to preserve the rare wetland habitats which are home to six endemic fish species. Managers recognized early the need to work with others across the watershed because conservation success depends on the condition of the surrounding landscape. Refuge managers have employed a suite of strategies to conserve natural resources, promote partnerships, and enhance collaborative conservation across the landscape.



99-Bar Ranch

KEY ISSUES ADDRESSED

The Rio Yaqui Basin has been severely affected by human activities, including vegetation clearing, unsustainable historic grazing practices, and groundwater pumping. Riparian wetlands are rare habitats that harbor significant portions of the regional biodiversity, and their maintenance necessitates protection from further degradation. The condition of riparian habitats depends on the health of uplands—for example, higher vegetation cover in uplands can slow the flow of water during flood events and reduce in-channel erosion. Extending protection and rehabilitation efforts to upland habitats is therefore essential for riparian conservation. This is true for LCNWR, where the refuge and riparian area are supported by a much larger watershed with approximately 53% public and 47% private ownership. Conservation easements restrict subdivision, building development, and other land uses that would potentially harm the property's value as fish and wildlife habitat.

PROJECT GOALS

- Purchase conservation easements to protect water resources and increase connectivity of riparian and upland habitats

PROTECTING THE WATERSHED

The portion of Leslie Creek on LCNWR is supported by the watershed encompassing two ranches and provides perennial aquatic habitat for breeding Mexican Longfin Dace, Yaqui Topminnow, and Yaqui Chub.



Federally Endangered Yaqui Chub (*Gila purpurea*)

PROJECT HIGHLIGHTS

Forward-Thinking Boundary: The 2,765-acre Refuge occupies a small portion of the 25,000-acre refuge acquisition boundary—the designated area in which the U.S. Fish and Wildlife Service (Service) can acquire land. This large boundary area was essential to provide opportunities to pursue habitat protection and conservation of fish and wildlife in a broader watershed.

Building Relationships: The Service built trust with the Malpai Borderlands Group, a local coalition of conservation-minded ranchers who support protecting private land adjacent to LCNWR. The group's support for the proposed Refuge acquisition boundary positively influenced local opinion and public acceptance of Service involvement.

A Tale of Two Easements: Two conservation easements were purchased on ranches within the acquisition boundary to help ensure survival of native fish and wildlife on a landscape scale while providing for normal livestock ranching operations and watershed restoration activities to continue on the ranches. Both ranches are dedicated to livestock production, yet they also inherently support a variety of substantial conservation values.

Collaborators

- US Fish and Wildlife Service
- Bar Boot Ranch
- 99-Bar Ranch

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Photos courtesy of Bill Radke/USFWS/Leslie Canyon NWR

LESSONS LEARNED

The acquisition of conservation easements, combined with other landscape-scale conservation strategies, has helped prevent landscape fragmentation and has protected fish and wildlife habitat from potentially detrimental human disturbances such as concentrated housing and agricultural development, mineral exploration, and harmful water diversion.

Conditions surrounding land ownership, personal interest, and financial security can change conservation partnerships and management cooperation. For example, the 99-Bar Ranch sold during 2014. While the conservation easement remains in place, the new owners do not appear to be actively interested in collaborating on further landscape-scale conservation.

Ranching and conservation missions share many values, and ranchers and wildlife managers can therefore find common ground in their management approaches. Both are often dependent upon open space, water availability, and travel corridors for animal movement across the landscape.

NEXT STEPS

- Continue working with private landowners to encourage the continuity of landscape scale conservation activities within the watershed

PROJECT RESOURCES

For more information on this project, contact Bill Radke: bill_radke@fws.gov

For additional project resources and case studies, visit the Collaborative Conservation and Adaptation Strategy Toolbox: WWW.DESERTLCC.ORG/RESOURCE/CCAST



Water Tank on Bar Boot Ranch now Holding Endangered Fish