FORT HUACHUCA
SENTINEL LANDSCAPE

Arizona | est. 2015

Located in southern Arizona's Sonoran Desert, Fort Huachuca is one of the largest unmanned aerial vehicle training facilities in the world, supporting operations for the U.S. Army, U.S. Air Force, U.S. Marine Corps, and U.S. Customs and Border Protection. The arid, remote landscape surrounding the post is predominantly made up of cattle ranches and native grasslands. This type of land use supports Fort Huachuca by ensuring low levels of electromagnetic interference on the installation's training activities. However, development pressure is increasing in the region due to urban sprawl and population growth. Land use conversion poses challenges to local communities by increasing competition for limited water resources, fragmenting important wildlife habitat, and encroaching upon Fort Huachuca's critical airspace. As a result, a group of partners came together to form the Fort Huachuca Sentinel Landscape in 2015. The primary goal of this landscape is to use collaborative, community-driven strategies to tackle issues such as water conservation, agricultural viability, wildlife habitat restoration, and military mission protection.

Partners Enhance Water Quantity for the San Pedro River

Stretching from Mexico through Arizona, the San Pedro River supports a vibrant ecosystem, local human populations, and critical training operations at the U.S. Army's Fort Huachuca. The Fort Huachuca Sentinel Landscape is home to two-thirds of the waterway, which is one of the last free-flowing rivers in the Southwest. For years, rapid development in the region has increased demand for water, leaving portions of the San Pedro River dry. In response, Fort Huachuca Sentinel Landscape partners formed the Cochise Conservation and Recharge Network, an initiative dedicated to conserving groundwater and improving the health of riparian habitat in the Upper San Pedro Watershed. The network accomplishes its mission in two ways. First, partners acquire conservation easements to preclude additional development in the area. Over its five-year lifespan, the Network has permanently protected over 6,000 acres of land along the desert river, which one estimate suggests avoids 1 billion gallons of potential groundwater pumping per year. Second, the Network facilitates replenishment projects that capture stormwater and effluent and funnel it to an

Figure 1: Fort Huachuca Sentinel Landscape Map

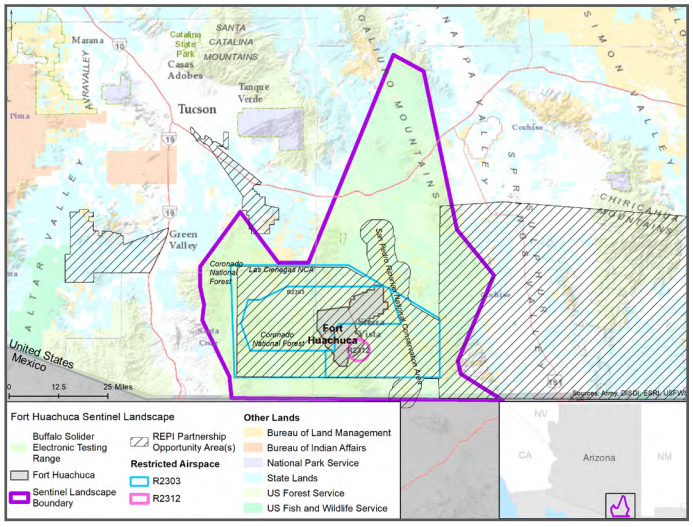


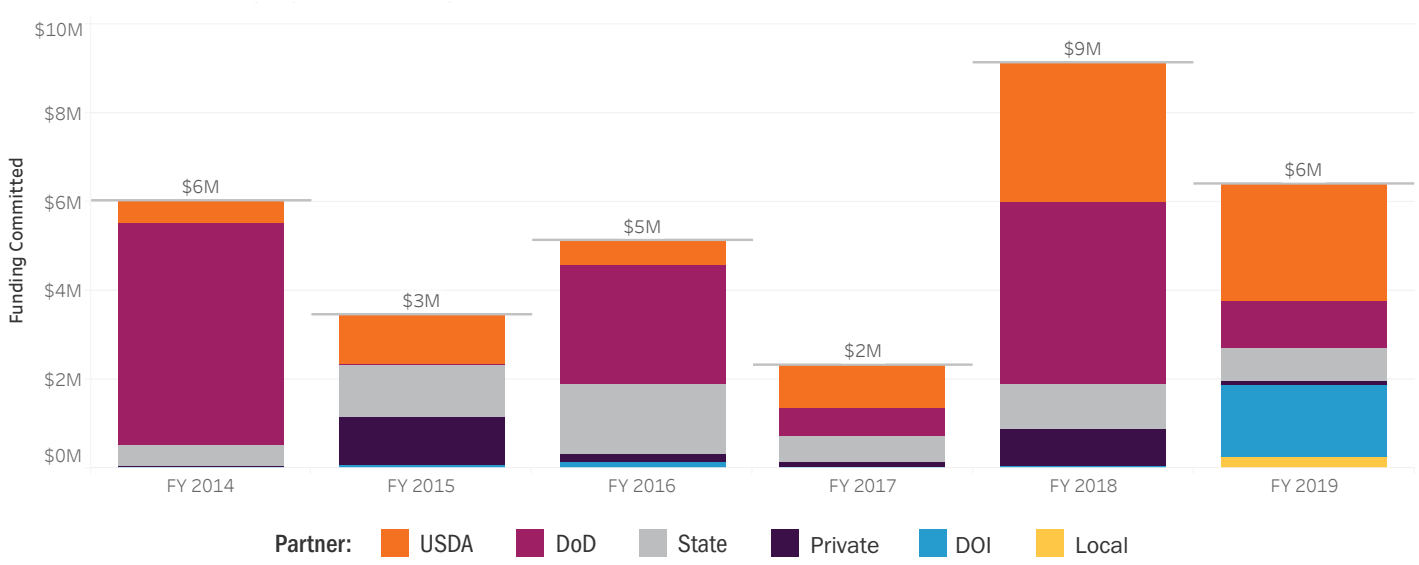
Table 1: Fort Huachuca Sentinel Landscape Footprint Details (acres)

Total Protected Acres:[1]	62,633
Total Enrolled Acres:[2]	271,017
Active Base Area:	80,912
Total Sentinel Landscape Area:	1,680,895

[1] Represents total acres protected by projects administered by sentinel landscape partners since FY 2014

[2] Represents total acres enrolled in technical assistance programs administered by sentinel landscape partners since FY 2014

Figure 2: Fort Huachuca Sentinel Landscape Total Funding by Partner



underground aquifer that feeds the San Pedro River. One such effort, the Palominas Stormwater Recharge and Flood Control Project, recharges 98 acre-feet per year using a large detention basin and 13 recharge cells. Through frequent monitoring, the partners gather data about the volume and rate at which the facility recharges water, which will be used to test similar innovative water conservation practices in the region.

Federal-Tribal Partnership Reduces Risk of Wildfires

The Coronado National Forest blankets portions of the Fort Huachuca Sentinel Landscape. Having once been home to indigenous communities, the Coronado National Forest holds cultural significance for Native American Tribes in the region. As a result, the U.S. Forest Service integrates tribal perspectives into its management of the land. In 2018, the Coronado National Forest and the Bureau of Indian Affairs (BIA) identified an opportunity to build upon their existing relationship by forming a collaborative wildfire mitigation initiative. Funded through the Reserved Treaty Rights Land Program, the project enables the Fort Apache Agency to conduct thinning projects and prescribed burns on Coronado National Forest land. Fire is an important agent of renewal for the forest, and when introduced effectively, reduces the risk of wildfire in the region and improves habitat for over 570 species. In addition to providing restoration benefits, this project also allows the Fort Apache Agency to contribute to the management of the Chi'chil, an acorn from the Emory oak that is an important food source and cultural element for the Apache people. This initiative demonstrates that effective stewardship is not bound by jurisdiction. In 2019, BIA, the Coronado National Forest, and Fort Apache Agency received the prestigious Pulaski Award, which recognizes outstanding performance in areas of interagency collaboration.

Conservation Workshop Unites Partners

Funding acquired through the Department of Defense's Readiness and Environmental Protection Integration Program has helped Fort Huachuca conserve 13,857 acres within the Buffalo Soldier Electronic Test Range, precluding incompatible development within the range complex and beneath the installation's restricted airspace. One noteworthy project occurred in 2018 when Fort Huachuca partnered with Arizona Land and Water Trust and USDA's Natural Resource Conservation Service to permanently protect the Rose Tree Ranch. Totaling 1,150-acres, the ranch sits within the Babocomari River Watershed and the Sonoita Grassland Conservation Area. In May 2019, the Santa Cruz Natural Resource Conservation District hosted a workshop on the Rose Tree Ranch for the Fort Huachuca Sentinel Landscape partners focused on ecological sites, soils, and plant identification. During the workshop, a soil expert from the University of Arizona guided attendees through the history of erosion and deposition in the area. A Rangeland Management Specialist then explained how elevation, precipitation, percent slope, soil type, and vegetation contribute to an ecological site's classification. Lastly, a representative from Arizona Revegetation and Monitoring provided tutorials on plant identification. In all, the workshop was an effective means of information sharing and will be replicated by partners in the future.