

# CAMP BULLIS SENTINEL LANDSCAPE

Texas | est. 2022



The Camp Bullis Sentinel Landscape, based in the Texas Hill Country, encompasses ranch lands, spring-fed rivers, and one of the fastest growing regions in the country. Within this region, Joint Base San Antonio's Camp Bullis provides training opportunities for 266 mission partners, supporting all DOD enlisted and officer medical training, military intelligence, special forces, pre-deployment, national, and international training requirements.

With rapid population growth emanating from San Antonio and the I-35 corridor, the Texas Hill Country and Camp Bullis Sentinel Landscape are facing a mounting number of challenges affecting the long-term resilience of the region's natural resources. New development contributes to the loss of agricultural lands and increased ambient light pollution, impacting night-time military training. Growing demands on existing water supply have led to the loss of spring flow and aquifer drawdowns, impacting drinking water supplies for Camp Bullis, rural landowners, towns, and cities.

These and other challenges have attracted a myriad of partners to come together to create a collective vision for how to invest in protecting the natural resources that define the region as it grows. Since forming the Camp Bullis Sentinel Landscape, more than 50 partner organizations have committed to collaborate towards shared goals.

## SUPPORTING WATER QUALITY AND QUANTITY THROUGH LAND STEWARDSHIP

The Camp Bullis Sentinel Landscape is defined by its unique surface and groundwater resources. Spring-fed creeks and rivers carve the rolling hills and connect inextricably with the Edwards and Trinity Aquifers. The Guadalupe, Medina, and San Antonio Rivers cross the Camp Bullis Sentinel Landscape, providing

Figure 1: Camp Bullis Sentinel Landscape Map

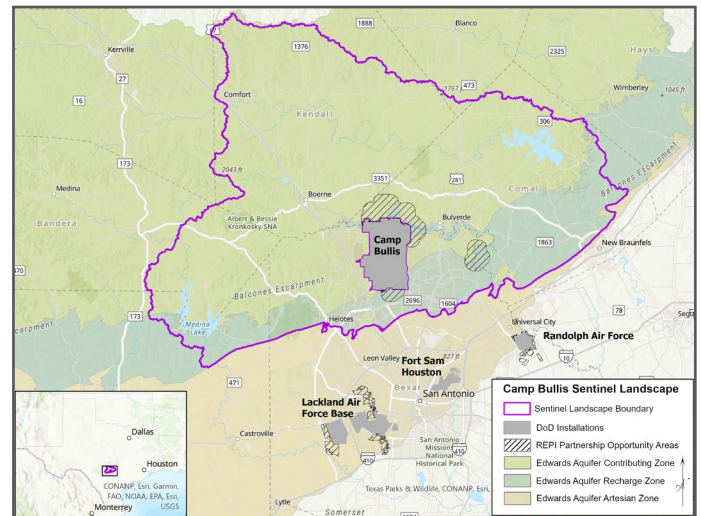


Table 1: Camp Bullis Sentinel Landscape Footprint Details (from year established through fiscal year 2021)

Total Protected Acres <sup>2</sup>	0
Total Enrolled Acres <sup>3</sup>	0
Active Base Area	28,000
<b>Total Sentinel Landscape Area</b>	<b>949,744</b>

critical flows that support the economic and ecological vitality of the region's rural ranchlands and growing urban areas, all the way to the bays and estuaries of the Gulf of Mexico. This part of the Texas Hill Country is home to a rich agricultural heritage, numerous wildlife species endemic to Central Texas, and outdoor recreation areas sought by many.

Together, Sentinel Landscape partners are working to improve watershed health and promote landscape resilience through water quality and quantity protection initiatives. Partners are working with a broad diversity of stakeholders, including

<sup>1</sup> Watershed Boundary Dataset, U.S. Geological Survey, 1 June 2020.

<sup>2</sup> Protected acres are recognized as land acquisitions—fee simple or easement—that have completed the due diligence and closing actions necessary to obtain a real estate interest.

<sup>3</sup> Land is considered enrolled if the property owner voluntarily participates in a federal or state land-management program that provides financial or technical assistance to promote sustainable agricultural practices, restore imperiled species and their habitat, or preserve critical natural resources; or if a landowner or an organization receives a federal or state grant to conduct a conservation project on said property.



*U.S. Army Medical Department Center and School Basic Officer Leadership Course students prepare to evacuate simulated wounded during training maneuvers at Joint Base San Antonio-Camp Bullis, Texas (credit: U.S. Air Force).*

local communities and volunteering private land stewards, to champion and increase investment in land stewardship.

By supporting land stewardship practices that improve soil health and infiltration over aquifer recharge and contributing zones, sentinel landscape partners hope to enhance agricultural productivity as well as groundwater recharge to the Edwards and Trinity Aquifers.

## ADDRESSING CLIMATIC RISKS THROUGH INNOVATIVE PARTNERSHIPS

Camp Bullis Sentinel Landscape partners, including Hill Country Alliance and Texas Parks & Wildlife Department, are already advancing stewardship programs for rural landowners. These hands-on projects are designed to engage willing landowners

and improve soil health through stewardship practices that increase soil moisture levels and plant production, and mitigate flooding and erosion.

In the more urban and suburban portions of the region, the San Antonio River Authority is managing projects that will demonstrate effective strategies to manage water resources of the Edwards Aquifer. One such project is assessing how four different permeable pavement designs affect the water quality and quantity of stormwater runoff compared to impermeable pavement surfaces over the Edwards Aquifer Recharge Zone.

Through these and other efforts, the Camp Bullis Sentinel Landscape is reaching beyond traditional natural resource, agricultural, and development fields to promote improved land management and building practices that can mitigate impacts of prolonged drought, flash floods, and destructive wildfires.

One of the defining features of the Camp Bullis Sentinel Landscape is its broad diversity of partners, spanning local, state, and federal agencies, nonprofits, academic institutions, and private landowners. The key partners listed below begin to capture the breadth of knowledge, commitment to working across boundaries, and passion that is being marshalled to tackle the full complexity of the conservation challenges—and opportunities—the Camp Bullis Sentinel Landscape faces. to working across boundaries, and passion that is being marshalled to tackle the full complexity of the conservation challenges—and opportunities—the Camp Bullis Sentinel Landscape faces.

### Key Partners

- ★ Alamo Area Council of Governments
- ★ Alamo Resource Conservation & Development Area, Inc.
- ★ Banderita County River Authority & Groundwater District
- ★ Bat Conservation International
- ★ Bexar Audubon Society
- ★ Camp Stanley
- ★ Cibolo Center for Conservation
- ★ Cibolo Conservancy
- ★ City of San Antonio
- ★ Comal County Conservation Alliance
- ★ Comal Country Friends of the Night Skies
- ★ Compatible Lands Foundation
- ★ Cow Creek Groundwater Conservation District
- ★ Edwards Aquifer Authority
- ★ Edwards Aquifer Conservancy Edwards Aquifer Conservation
- ★ Federal Emergency Management Agency
- ★ Great Springs Project
- ★ Greater Edwards Aquifer Alliance
- ★ Green Spaces Alliance
- ★ Guadalupe-Blanco River Trust
- ★ Hill Country Alliance
- ★ International Dark Sky Association – Texas Chapter
- ★ Joint Base San Antonio
- ★ Kendall Country Friends of the Night Skies
- ★ Kendall County Soil & Water Conservation District
- ★ National Cave and Karst Research Institute
- ★ Oaks and Prairies Joint Venture
- ★ San Antonio Board of Realtors
- ★ San Antonio Chamber of Commerce
- ★ San Antonio Hispanic Chamber of Commerce
- ★ San Antonio River Authority
- ★ Society for Ecological Restoration – Texas Chapter
- ★ Texas A&M – Natural Resources Institute
- ★ Texas Agricultural Land Trust
- ★ Texas Department of Agriculture
- ★ Texas Division of Emergency Management
- ★ Texas Military Preparedness Commission
- ★ Texas Parks and Wildlife Department
- ★ Texas State Soil & Water Conservation Board
- ★ Texas State University
- ★ Texas State University – Meadows Center for Water & the Environment
- ★ Texas Military Department
- ★ Texas Wildlife Association
- ★ The Nature Conservancy
- ★ Trinity Glen Rose Groundwater Conservation District
- ★ Trust for Public Land
- ★ University of Oklahoma – SC CASC
- ★ University of Texas – San Antonio
- ★ U.S. Air Force Civil Engineering Center
- ★ U.S. Army Corps of Engineers
- ★ U.S. Army Regional Environmental and Energy Office
- ★ U.S. Department of Agriculture – Natural Resources Conservation Service
- ★ U.S. Department of Defense
- ★ U.S. Department of Interior – Fish & Wildlife Service
- ★ U.S. Department of Interior – National Park Service Rivers, Trails and Conservation Assistance Program
- ★ U.S. Geological Survey