

Military Ranching: The value of ESD's to Training Land Management

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Background

- Originally established in 1917, Camp Bullis Training Site is a 27,887 acre sub-post of Fort Sam Houston.
- Approximately 10 miles long and 4 miles wide.
- Was primarily rural but has become increasingly urbanized through residential development and expansion of San Antonio
- Responsible for protection of environmental, cultural and natural resources

Mission

- Camp Bullis provides Base Operations Support and Training Support to JBSA and Mission Partners in order to sustain their Operational and Institutional training requirements
- Includes quality ranges, training areas, airspace, facilities, outdoor recreation programs, and necessary installation support to all active duty services, Reserve and National Guard units, law enforcement agencies and various civic groups.
- Camp Bullis is responsible for protection of environmental, cultural and natural resources. These resources provide quality and realistic training opportunities. Protection of these resources will allow Camp Bullis to continue mission activities into the future.

Vision

Camp Bullis Vision:

- ❖ Provide an environment that offers:
- ❖ State of the art training facilities, to include firing ranges, simulation facilities, maneuver lands, other training enablers and services, that fully support the training requirements of our mission partners.
- ❖ A professional staff, dedicated to mission accomplishment and customer service.
- ❖ A quality of life (facilities & services) for all who train and work here that is commensurate with their service.

Camp Bullis Training

- Classroom training occurs at the other JBSA locations while Camp Bullis provides the field training component
- Most training is medical in nature (JBSA is now the home of Military Medicine)
- Most training is dismounted from vehicles and cross country on foot. (No tracked vehicle or high explosives)
- The on-foot nature of Camp Bullis training requires more management of vegetation to not impede training. (IE: impenetrable cedar and oak thickets that restricts individual personnel movement)

Potential Mission Constraints

Federal/State Laws & Regs

- Environmental (Natural Resources/Endangered Species, Env. Compliance/Waste Mgt, etc.)
- Cultural/Historical
- Water (Edwards Aquifer, Wetlands, Floodplain)

Natural Environment

- Vegetation
- Terrain

Potential Mission Constraints

Growth (External & Internal)

- External -
Encroachment,
Endangered Species
Migration
- Internal – Managing
Mission Partner
Population Growth,
Training Support
Facilities, Etc.



Using ESD's

- ESD's were developed by NRCS in 2002 for Camp Bullis.
- The ESD's provided information on various plant communities and their attributes.
- Included was information relating to thresholds, drivers and pathways
- Laid the framework for management decisions
- ESD's are a legal scientific document

2002 Protocols

- 51 sites were sampled as pounds of production and canopy cover.
- Similarity Index calculated.
- Soil mapping was updated.
- Information was derived from range site descriptions, historical data, professional consensus and field inventories.

2012 Needs

- To maintain the training mission and the environmental mission, the composition, structure and architecture of the vegetation also needs to be quantified and managed.
- New ESD concepts have been developed since the 2002 survey.
- A protocol was developed with NRCS to provide long term monitoring

Foot Soldiers



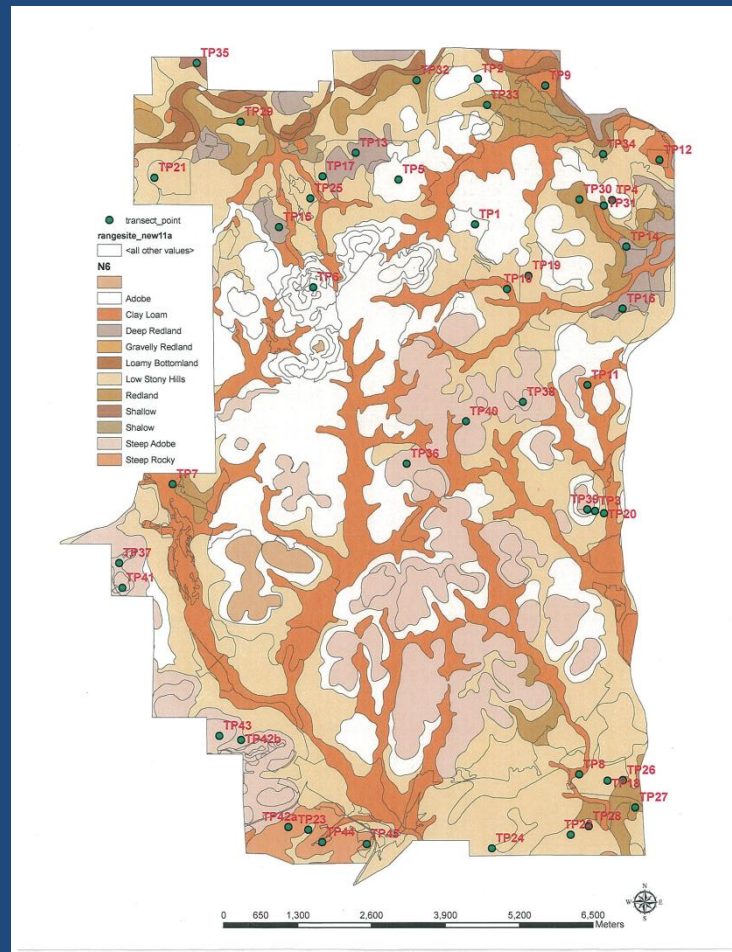
Habitat



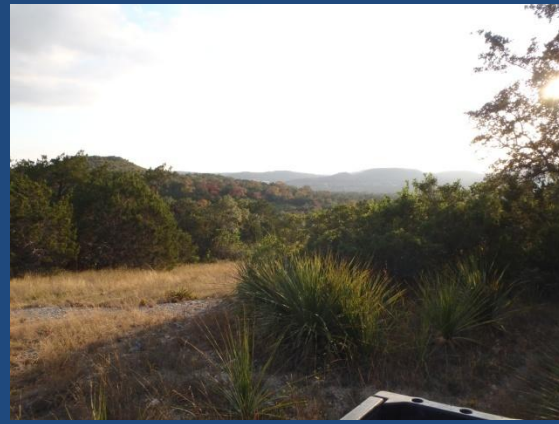
Keep Habitat As Habitat Manage The Rest for Training



ESD's on Camp Bullis



Bullis landscapes



Diverse Topography



NATURAL RESOURCES

Management Practices



Prescribed Burning



Protection



Brush Management



Research & Monitoring



Invasive Species Removal



Population Management
& Recreation

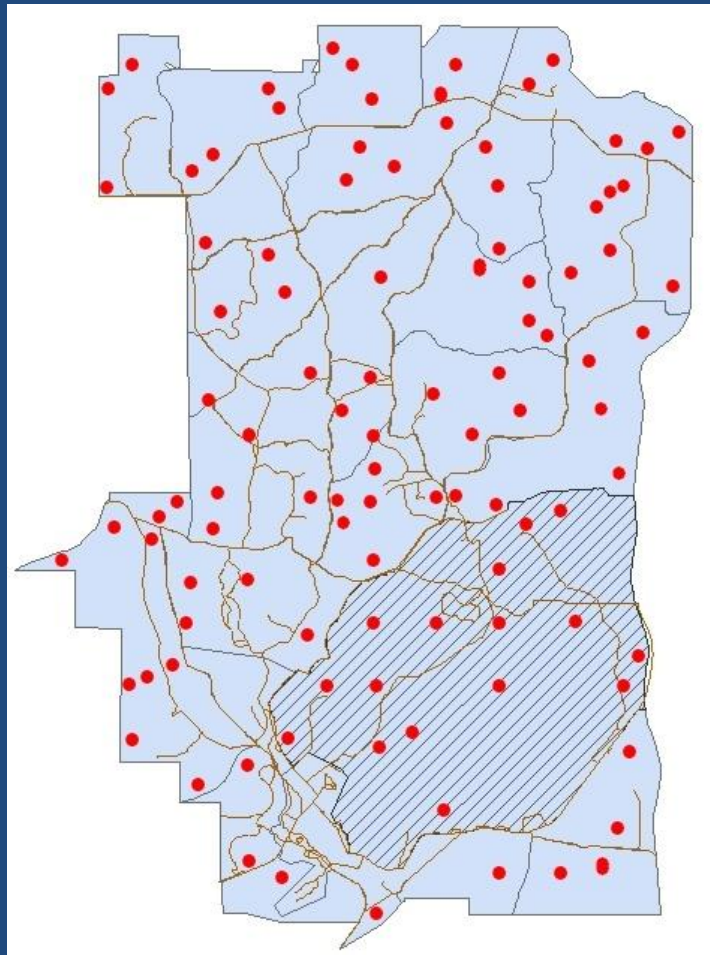
Monitoring Needed

- Establish benchmark vegetation attributes
 - For the military mission
 - Environmental mission

Monitoring Components

- 100 permanent points, each ESD represented
- Some in habitat some not
- Used GPS to navigate to each one.
- Soils/ESD verified
- Plant community attributes were inventoried
- Photos taken

Point Distribution



Attributes Monitored

Production by species

Canopy

Foliar cover

Ground cover

Plant densities

Canopy layers

Canopy density

Plant structure

Fuel loading

Canopy gaps

Visual obstruction

Plant inventory



Analysis

- Data to be stored digitally
 - Populated into GIS
 - Analyzed by desired attributes
 - Used to forecast when management action is needed to maintain training mission.
 - The data will be used to update existing ESD's which will also provide technical data for use on private lands

Additional Monitoring

Wildfire Recovery



Construction Recovery



Fuel Loading



Future Monitoring

- Monitored will be done on a recurring basis, depending upon need.
- Goal is to re-surveyed every 3-5 years
- Analysis of change between survey periods will serve as a basis to determine management effects for sculpting vegetation.



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