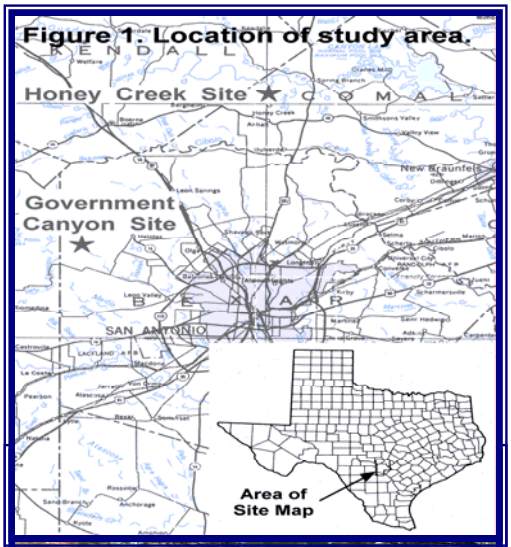

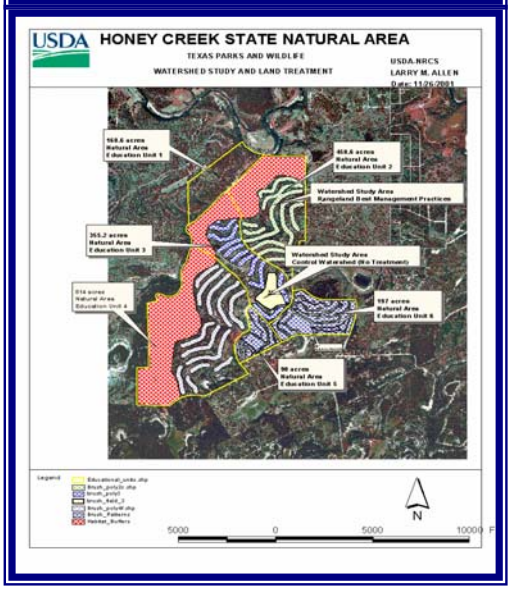

Honey Creek State Natural Area

Watershed Studies in the Edwards Region

Honey Creek State Natural Area is hosting a rangeland paired watershed study on about 800 of the 2700 acre property. The area is part of a long-term cooperative project that will evaluate the combined effects of selective removal of Ashe Juniper and habitat restoration on the hydrologic cycle of watersheds in the Texas Hill Country. Surface runoff, spring flow, and deep infiltration from these areas provide recharge needed by the Edwards Aquifer and Trinity Aquifer to support the agriculture and urban needs of the region.

Partnership involved in this project includes:

- USDA - Natural Resources Conservation Service
- Texas Parks and Wildlife Department
- UTSA – Center for Water Research
- U. S. Geological Survey
- Edwards Aquifer Authority
- San Antonio River Authority
- Guadalupe-Blanco River Authority
- Edwards Region Grazing Lands Conservation Initiative

Currently the project is collecting information from:

- Six tipping bucket rain gages- measure rainfall amount and intensity.
- Two Bowen energy ratio stations- determine the water balance of the system.
- Four stream flow gages- document surface runoff.
- Three water quality sample sites- monitored so water quality samples can be analyzed for major ions, nutrients, and suspended sediments.
- Two remote weather stations- installed to record all weather conditions.
- Two wells - monitored to record groundwater level measurements to determine on site recharge.

The USDA Natural Resources Conservation Service is working with the Texas State Park's Natural Resources Program and the Guadalupe River State Park/Honey Creek State Natural Area complex to undertake this study consistent with the resources conservation plan for the site.

- Plans incorporate studies that have addressed potential impacts on sensitive resources such as archeological sites, karst features, rare or endangered plants, animals, birds, and vegetation communities.

Best management practices such as selective brush management, re-vegetation with local plant materials and prescribed burning will be utilized as tools in habitat restoration.